Slovenian bathing water quality in 2015







BWD Report For the Bathing Season 2015 Slovenia

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 Slovenia.

1. BWD reporting in the season 2015

In 2015 bathing season, 47 bathing waters have been reported in Slovenia. 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;

Bathing waters of Slo	venia in 2015
Total reported	47
Coastal	21
Inland	26
Max season period	78 / 107 days
Coastal	1 Jun to 15 Sep
Inland	15 Jun to 31 Aug
Samples taken	350
Share of bathing waters	96 %
with good or excellent	30 /0
water quality	
Tatal quality	
Reporting under	2010
Directive 2006/7/EC since	

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

The authorities of Slovenia report data according to the new BWD (2006/7/EC) since the season 2010. The data for the season 2015 were delivered to the European Commission by **23 December 2015**.

Altogether, **47 bathing waters** have been reported – 0.2% of all bathing waters in Europe. Out of all bathing waters in Slovenia, none have been newly identified in 2015 season. 45% of bathing waters in Slovenia are of coastal type; the other 55% are inland. **350 samples** were taken at bathing waters throughout the season – 7 per bathing water on average.

¹ Directive BWD 2006/7/EC, available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0]:L:2006:064:0037:0051:EN:PDF

² See the BWD Data Dictionary for detailed explanations: http://dd.eionet.europa.eu/datasets/3294#tables

The maximum bathing season period was from 1 June to 15 September for coastal bathing waters, i.e. 107 days altogether. Maximum inland bathing season period was from 15 June to 31 August, i.e. 78 days.

Detailed information on bathing waters is available from national portal at http://www.mop.gov.si/si/delovna_podrocja/voda/kopalne_vode/seznam_in_profili_kopalnih_voda/profili_kopalnih_voda.

2. Assessment methodology³

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) 4;
- a minimum of four samples per season⁵;
- a minimum of one sample per month⁶.

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'. All bathing waters met the described monitoring requirements set by the Directive. Table 1 shows the statistics of bathing waters according to monitoring requirements.

³ The methodology used by the EC and the EEA is described here, while results of assessment by national authorities may differ in individual cases.

⁴ A pre-season sample is taken into a sum of samples per season.

⁵ Three samples are sufficient if the season does not exceed eight weeks or the region is subject to special geographical constraints.

⁶ 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: Bathing waters in 2015 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 2015)		100.0%
These bathing waters have been monitored according to provisions and	47	
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 2015)		0.0%
These bathing waters exist throughout the last assessment period but have	0	
not been monitored throughout the period according to provisions for	0	
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 2015		
These bathing waters do not have complete dataset for the last assessment		0.0%
period because they are new, have been subject to changes (that are likely	0	
to affect the classification of the bathing water) or have been closed. They		
cannot be quality-classified.		
Total number of bathing waters in 2015	47	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.

If the quality assessment was not possible for all bathing waters, they could instead be classified as either:

- not enough samples⁷;
- new8:
- changes9;
- closed¹⁰.

⁷ 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).

⁸ Classification not yet possible because bathing water is newly identified and a complete set of samples is not yet available.

⁹ Classification is not yet possible after changes that are likely to affect the classification of the bathing water.

¹⁰ Bathing water is closed temporarily or throughout the bathing season.

3. Bathing water quality

The results of the bathing water quality in Slovenia throughout the past period 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 website¹¹ and the European Environment Agency's bathing water website¹².

3.1 Coastal bathing waters

In Slovenia, all existing coastal bathing waters met at least sufficient water quality standards in 2015. See Appendix 1 for numeric data.

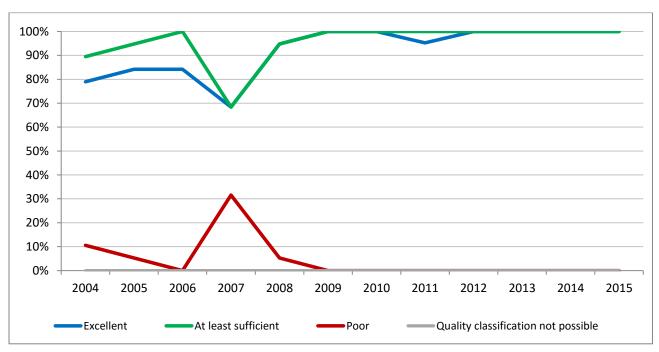


Figure 1: Coastal bathing water quality trend in Slovenia. Note: the "At least sufficient" class also includes bathing waters of "Excellent" quality class, the sum of shares is therefore not 100%.

¹¹ http://ec.europa.eu/environment/water/water-bathing/index_en.html

¹² http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water

3.2 Inland bathing waters

100.0% of all existing inland bathing waters were of at least sufficient water quality in 2015. See Appendix 1 for numeric data.

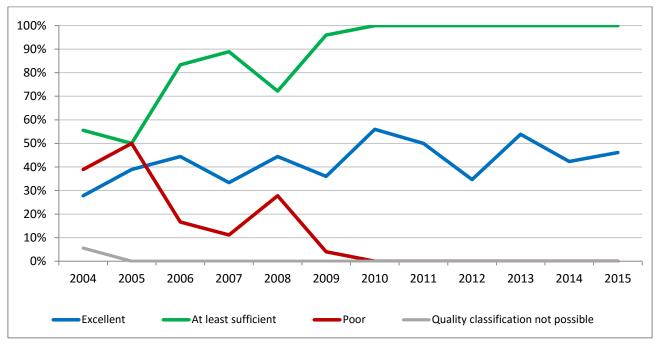


Figure 2: Inland bathing water quality trend in Slovenia. Note: the "At least sufficient" class also includes bathing waters of "Excellent" quality class, the sum of shares is therefore not 100%.

4. Information regarding management and other issues

Management of bathing waters in Slovenia included publishing monitoring calendar before the season start, organising press conference, monitoring bathing waters throughout the season, assessing quality according to standards of public health institute, assessing overall quality after the season end, informing public online and on site as well as in press, giving advices for safe and healthy bathing to public.

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: 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 (http://www.eea.europa.eu/themes/water/interactive/bathing/state-of-bathing-waters) allows users to view the bathing water quality at more than 21 000 coastal beaches 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 Slovenia from 2012 to 2015

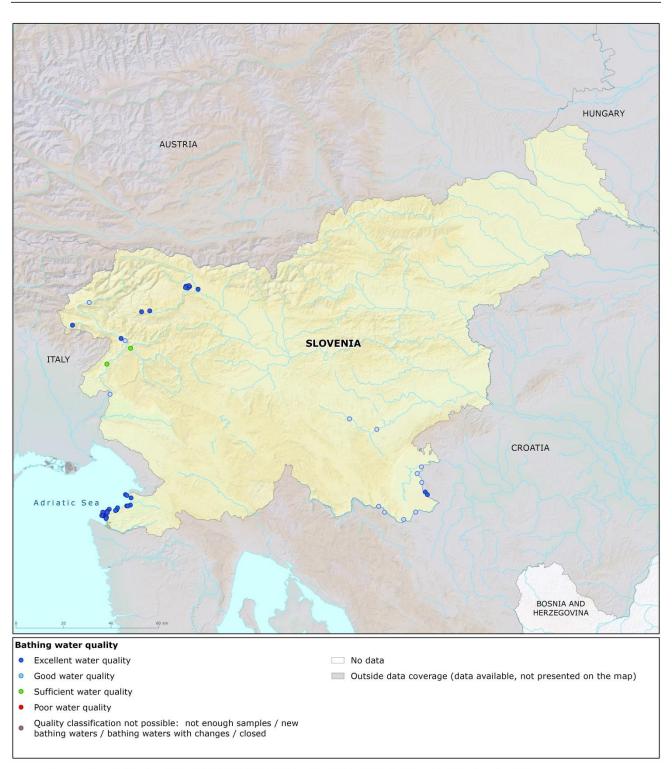
Table 2: Bathing waters in the season 2015 according to quality

num o bath		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	%
Coastal	2012	21	21	100.0	21	100.0	0	0.0	0	0.0
	2013	21	21	100.0	21	100.0	0	0.0	0	0.0
	2014	21	21	100.0	21	100.0	0	0.0	0	0.0
	2015	21	21	100.0	21	100.0	0	0.0	0	0.0
Inland	2012	26	9	34.6	26	100.0	0	0.0	0	0.0
	2013	26	14	53.8	26	100.0	0	0.0	0	0.0
	2014	26	11	42.3	26	100.0	0	0.0	0	0.0
	2015	26	12	46.2	26	100.0	0	0.0	0	0.0
Total	2012	47	30	63.8	47	100.0	0	0.0	0	0.0
	2013	47	35	74.5	47	100.0	0	0.0	0	0.0
	2014	47	32	68.1	47	100.0	0	0.0	0	0.0
	2015	47	33	70.2	47	100.0	0	0.0	0	0.0

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 2015 bathing season in Slovenia



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