

# Bathing water results 2008 – Slovenia

## 1. Introduction

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

Slovenia reported 5 parameters under the Directive 76/160/EEC (1 Total coliforms, 2 Faecal coliforms, 8 Mineral oils, 9 Surface-active substances reacting with methylene blue, 10 Phenols (phenol indices)).

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 lasted 3.5 months, from 15 June to 30 September 2008 for coastal bathing waters and 2.5 months, from 15 June to 31 August 2008 for freshwater bathing waters.

Since the start of reporting in 2004, a total of 37 bathing waters were monitored in Slovenia, of which 19 were coastal bathing waters and 18 freshwater bathing waters (12 on rivers; 6 on lakes).

With 37 bathing waters Slovenia accounts for about 0.2% of the reported bathing waters of the European Union.

## 3. Results of bathing water quality

The results of the bathing water quality in Slovenia for the period 2004-2007 as reported in 2008 report and for the bathing season of 2008 are presented in Figure 1.

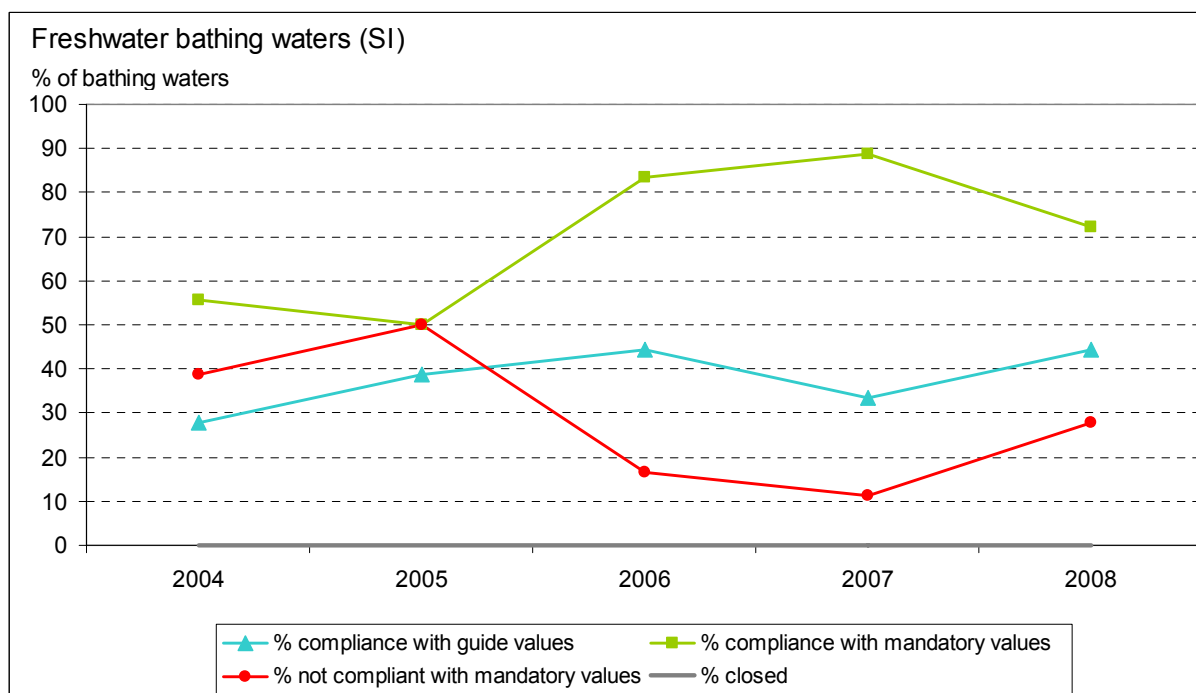
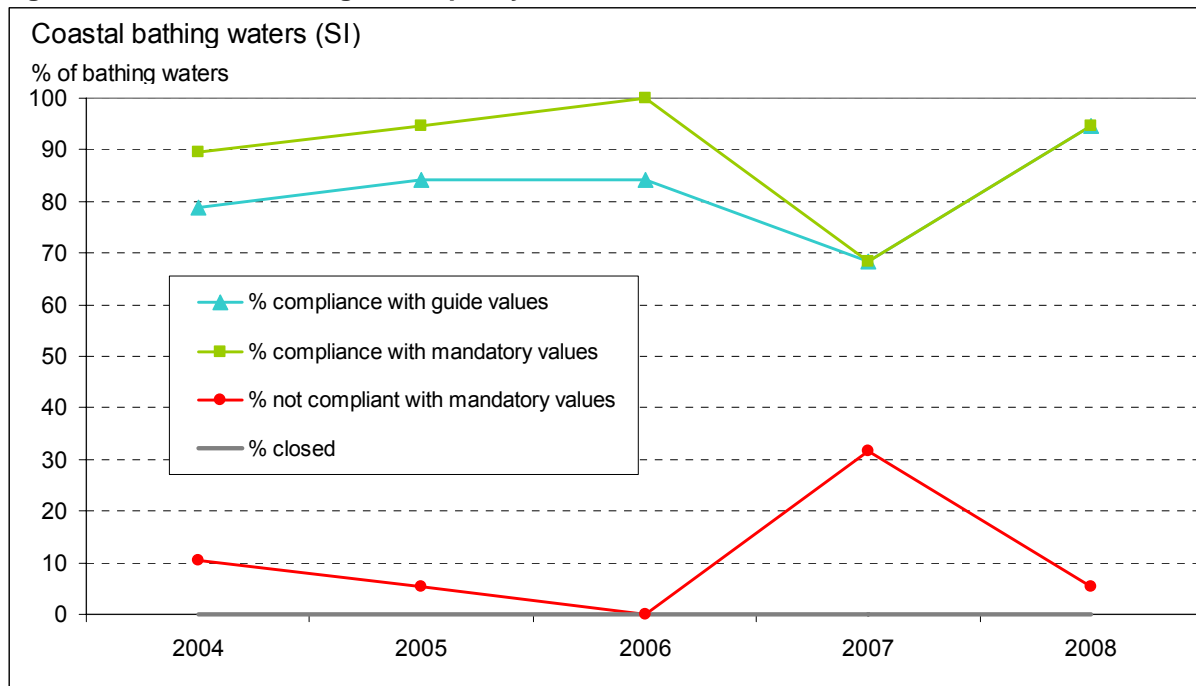
The graphs show, for coastal and freshwater bathing waters separately:

- 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 the 2008 season in Slovenia for all bathing waters.

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

**Figure 1: Results of bathing water quality in Slovenia from 2004 to 2008**



**Table 1: Results of bathing water quality in Slovenia from 2004 to 2008 as absolute numbers**

	Year	Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/ closed throughout the season
<b>SI</b>						
Coastal bathing waters	2004	19	15	17	2	0
	2005	19	16	18	1	0
	2006	19	16	19	0	0
	2007	19	13	13	6	0
	2008	19	18	18	1	0
Fresh water bathing waters	2004	18	5	10	7	0
	2005	18	7	9	9	0
	2006	18	8	15	3	0
	2007	18	6	16	2	0
	2008	18	8	13	5	0

Note: Bathing waters which were insufficiently sampled or not sampled according to the Bathing Water Directive were not included in this table. Therefore, in some cases, the sum of the different categories will not be equal to the total number of bathing waters.

**Table 2: Results of bathing water quality in Slovenia from 2004 to 2008 as percentages**

	Year	Total number of bathing waters	% compliance with guide values	% compliance with mandatory values	% not compliant	% banned/ closed throughout the season
<b>SI</b>						
Coastal bathing waters	2004	19	78.9	89.5	10.5	0.0
	2005	19	84.2	94.7	5.3	0.0
	2006	19	84.2	100.0	0.0	0.0
	2007	19	68.4	68.4	31.6	0.0
	2008	19	94.7	94.7	5.3	0.0
Fresh water bathing waters	2004	18	27.8	55.6	38.9	0.0
	2005	18	38.9	50.0	50.0	0.0
	2006	18	44.4	83.3	16.7	0.0
	2007	18	33.3	88.9	11.1	0.0
	2008	18	44.4	72.2	27.8	0.0

Note: Bathing waters which were insufficiently sampled or not sampled according to the Bathing Water Directive are not included in this table. Therefore, in some cases, the sum of the percentages is not equal to 100%.

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

	Year	Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/ closed throughout the season
<b>SI</b>						
Bathing waters	2008	37	26	31	6	0

## **4. Development of bathing water quality**

### **Coastal bathing waters**

In Slovenia, 94.7% of coastal bathing waters (18) met both the mandatory and more stringent guide values. This is a significant increase compared to the previous year, when 68.4% of bathing waters met both the mandatory and guide values. This is reflected into a decrease of the percentage of the non-compliant bathing waters (- 26.3%). The number of non-compliant bathing waters decreased from six (31.6%) to one bathing water (5.3%). Since the start of the reporting in 2004, no coastal bathing water had to be closed during the season.

Since 2004, there was an improvement in the quality of the coastal bathing waters, both in terms of compliance with the mandatory values and the guide values. 100% compliance rate with the mandatory values was reached in 2006. After a dip in 2007, the compliance rate increased again in 2008.

### **Freshwater bathing waters**

13 out of 18 freshwater bathing waters (72.2%) met the mandatory values in 2008. This is a decrease compared to the previous year (- 16,7%). The rate of the compliance with the guide values increased by two bathing waters (11.1%), reaching eight bathing waters (44.4%). Consequently, the difference between the compliance with the mandatory and guide values was reduced, but it still accounted for 27.8%. The number of non-compliant bathing waters increased from two (11.1%) to five bathing waters (27.8%). Since the start of the reporting in 2004, no freshwater bathing water had to be closed during the season.

As for the coastal bathing waters, there was an improvement in compliance with both the mandatory and the guide values since 2004. In 2008, however, the compliance with the mandatory values decreased.

## **5. General information as provided by the Slovenian authorities**

### **Provision of information to the public**

In 2008, informing the public on bathing water quality was provided in newspapers, on press conferences, information points and notice boards set up in bathing areas.

Information was supplied to the public also through the website of the Environmental Agency of the Republic of Slovenia as well as through other media (radio, newspapers). All national reports on the quality of bathing water and reports to the European Commission on the implementation of Directive 76/160/EEC in Slovenia are published on the websites of the Environmental Agency and the National Institute of Public Health of the Republic of Slovenia. The latter are also accessible via the website of the Ministry of the Environment and Spatial Planning, which also provides information on ongoing projects relating to the fulfilment of the requirements of Directive 76/160/EEC and Directive 2006/7/EC.

### **Non-complying bathing sites**

The results of the monitoring of bathing water quality show that non-compliance with the mandatory values is due to microbiological contamination of water, which can originate from various point and diffuse sources of pollution. In 2008, there were six non-compliant bathing waters, of which five were on rivers (Kolpa, Prelesje-Srednji Radenci (one sample); Krka, Žužemberk (one sample); Idrijca, Bača pri Modreju (one sample); Soča, Kanal (two samples); Soča, Solkan (one sample), and one was coastal bathing water (Hoteli Morje) due to one sample. The main reason for non-compliance was diffuse pollution from agricultural activities and point source pollution from urban waste water.

## **Wastewater treatment**

In financial terms, the establishment of an urban waste water disposal and treatment system is the Republic of Slovenia's major environmental investment. It is based on a programme of coordinated measures at national and municipal level, aimed at the gradual achievement of the objective of protecting the environment from the adverse effects of the discharge of urban waste water. Implementation of the Operational Programme for discharge and treatment is monitored and assessed by the Ministry of the Environment and Spatial Planning. The key implementing act for the achievement of the objectives in this field is the operational programme for urban waste water discharge and treatment (Government Decision No 352-08/2001-2 of 14 October 2004), which sets the timeframe for the construction of urban waste water collecting systems and treatment plants and provides a cost estimate.

The operational programme specifies the individual agglomerations' deadlines for ensuring that urban waste water is disposed of and treated in accordance with the provisions of Directive 91/271/EEC, taking into account the provisions of the Act concerning the conditions of accession of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, Slovakia and the adjustments to the Treaties on which the European Union is founded (OJ C 227 E, 23 September 2003), which lays down the deadlines for meeting the individual requirements of Directive 91/271/EEC in Slovenia. The level of treatment by the urban waste water treatment plants envisaged is defined in the regulations on the emission of substances in waste water discharged from urban waste water treatment plants and small urban waste water treatment plants, with due regard for the characteristics of, and the regime applicable to, the agglomerations concerned.

In the context of the novelation of the Operational Programme, the programme will be upgraded with the more stringent requirements relating to the discharge and treatment of urban waste water from the agglomerations situated in bathing water catchment areas or areas having an impact on bathing water, which were established in 2007, namely:

- tertiary treatment must be applied to urban waste water in all agglomerations with a population equivalent of more than 2 000 situated in the bathing water catchment area,
- supplementary treatment of urban waste water for the elimination of microbiological contamination must be ensured during the bathing season in addition to the tertiary treatment in all agglomerations with a population equivalent of more than 2 000 and in addition to the secondary treatment in all agglomerations with a population equivalent of less than 2 000, if the agglomeration is situated in the areas having an impact on bathing water,
- adequate individual arrangement of discharge and treatment must be applied to urban waste water in areas where public urban waste water collecting system is not foreseen.

## **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](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](http://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 Slovenia**

