

# BWD Report For the Bathing Season 2014

## Lithuania

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 Lithuania.

### 1. BWD reporting in the season 2014

In 2014 bathing season, 112 bathing waters have been reported in Lithuania. 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;
- *short-term pollution periods* – identifiable events that adversely affect water quality by faecal contamination; reporting is optional.

Bathing waters of Lithuania in 2014	
<b>Total reported</b>	<b>112</b>
Coastal	16
Inland	96
<b>Max season period</b>	<b>107 days</b>
	1 Jun to 15 Sep
<b>Samples taken</b>	<b>879</b>
<b>Share of bathing waters with good or excellent water quality</b>	<b>97 %</b>
<b>New BWD implemented in</b>	<b>2008</b>

The authorities of Lithuania report data according to the new BWD (2006/7/EC) since the season 2008. The data for the season 2014 were delivered to the European Commission by **9 December 2014**.

Altogether, **112 bathing waters** have been reported – 0.5% of all bathing waters in Europe. Out of all bathing waters in Lithuania, None have been newly identified in 2014 season. 14% of bathing waters in Lithuania are of coastal type; the other 86% are inland. **879 samples** were taken at bathing waters throughout the season – 8 per bathing water on average.

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

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

The bathing season period was from 1 June to 15 September, i.e. 107 days altogether. Detailed information on bathing waters is available from national portal at [http://www.smlpc.lt/lt/aplinkos\\_sveikata/maudyklos/](http://www.smlpc.lt/lt/aplinkos_sveikata/maudyklos/).

## 2. Assessment methodology<sup>3</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 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) <sup>4</sup>;
- a minimum of four samples per season<sup>5</sup>;
- a minimum of one sample per month<sup>6</sup>.

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 not all monitoring requirements are fulfilled the bathing water is categorised as 'sampling frequency not satisfied'. 91.1% of bathing waters met the described monitoring requirements set by the Directive, while the rest did not satisfy monitoring requirements or was either new, changed or closed. Table 1 shows the statistics of bathing waters according to satisfied BWD monitoring requirements.

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<sup>3</sup> The methodology used by the EC and the EEA is described here, while results of assessment by national authorities may somewhat differ. However, the provisions of the Directive should be followed in any case.

<sup>4</sup> A pre-season sample is taken into account at total number of samples per season.

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

<sup>6</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: Bathing waters in 2014 according to compliance with BWD monitoring provisions**

	Count	Share of total [%]
<b>BWs with sampling frequency satisfied and are not new, have no changes or were not closed in 2014</b> These bathing waters have been monitored according to BWD provisions (monitoring frequency satisfied and have pre-season sample. They have been quality-classified (excellent, good, sufficient, poor).	103	92.0%
<b>BWs with sampling frequency not satisfied and that are not new, have no changes or were not closed in 2014.</b> These bathing waters have not been monitored according to BWD provisions (monitoring frequency not satisfied). They may be quality-classified if there is a reasonable volume of samples available.	7	6.3%
<b>BWs that are new, changed or closed in 2014</b> These bathing waters are new or have been subject to changes that could affect bathing water quality.	2	1.8%
<b>Total number of bathing waters in 2014</b>	<b>112</b>	<b>100%</b>

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 are more or less 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, falling in the certain class given in Annex I of the Directive. This 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 samples<sup>7</sup>;
- new<sup>8</sup>;
- changes<sup>9</sup>;
- closed<sup>10</sup>.

<sup>7</sup> Not enough samples have been provided for the 2014 season or throughout the whole assessment period.

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

<sup>9</sup> Classification is not yet possible after changes affecting bathing water quality have been implemented.

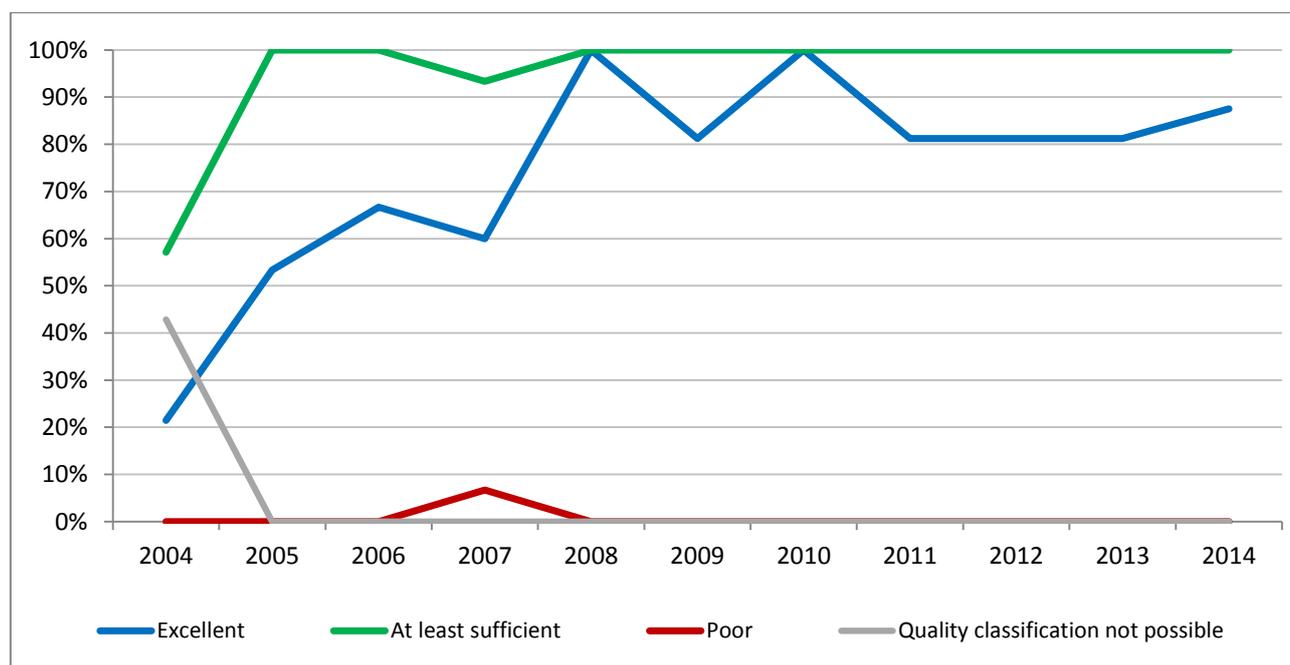
<sup>10</sup> Bathing water is closed temporarily or throughout the bathing season.

### 3. Bathing water quality

The results of the bathing water quality in Lithuania 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 website<sup>11</sup> and the European Environment Agency's bathing water website<sup>12</sup>.

#### 3.1 Coastal bathing waters

In Lithuania, all existing coastal bathing waters met at least sufficient water quality standards in 2014. See Appendix 1 for numeric data.



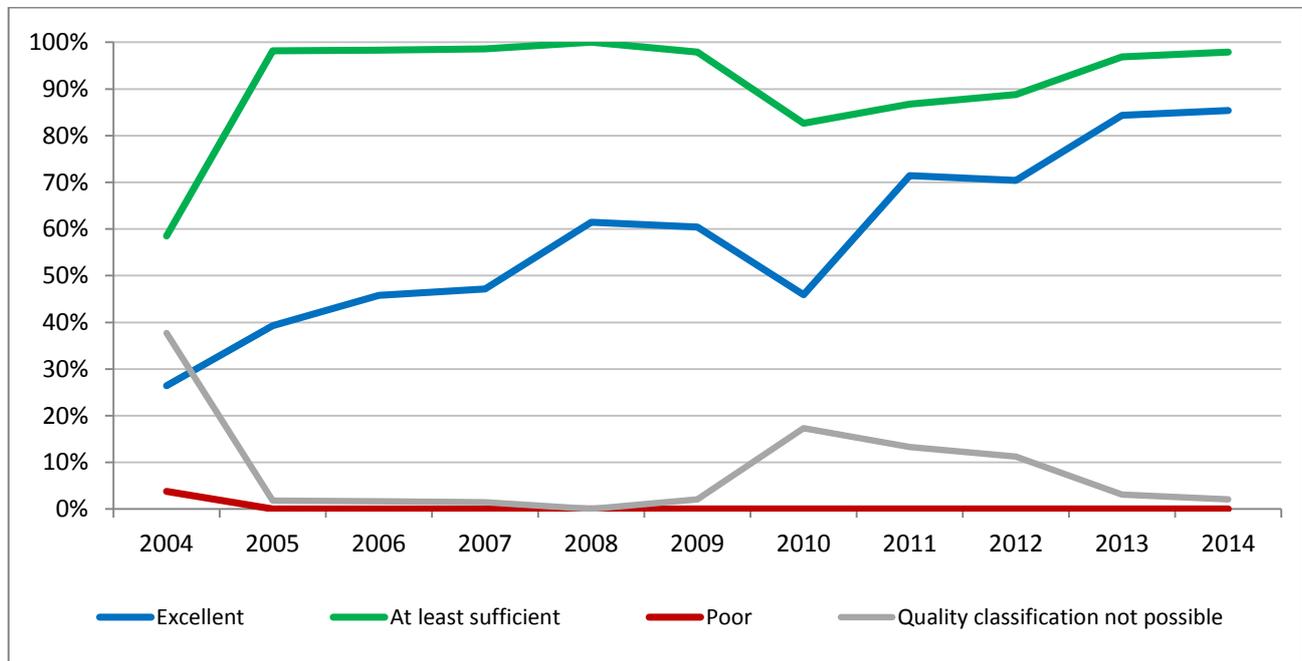
**Figure 1: Coastal bathing water quality trend in Lithuania.** Note: the "At least sufficient" class also includes bathing waters of "Excellent" quality class, the sum of shares is therefore not 100%.

<sup>11</sup> [http://ec.europa.eu/environment/water/water-bathing/index\\_en.html](http://ec.europa.eu/environment/water/water-bathing/index_en.html)

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

### 3.2 Inland bathing waters

97.9% of all existing inland bathing waters met at least sufficient water quality in 2014. See Appendix 1 for numeric data.



**Figure 2: Inland bathing water quality trend in Lithuania.** 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

The Information for the public about bathing water quality during the bathing season was provided on the websites of Municipalities and the Center for Health Education and Disease Prevention and on boards equipped on the beaches. The information includes:

- the duration for the bathing season;
- working hours for medical and rescue workers on the beach;
- the update results of bathing water quality;
- in case of short term pollution, the date when any bathing prohibition or advice against bathing are referred.

## **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](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 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 (<http://bwd.eea.europa.eu/>). 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 Lithuania from 2011 to 2014

Table 2: Bathing waters in the season 2014 according to quality

		Total number of bathing waters	Excellent quality or compliant with guide values		At least sufficient quality or compliant with mandatory values		Poor quality or non-compliant		Quality classification not possible: not enough samples /new bathing waters/bathing waters with changes/closed	
			No	%	No	%	No	%	No	%
Coastal	2011	16	13	81.3	16	100.0	0	0.0	0	0.0
	2012	16	13	81.3	16	100.0	0	0.0	0	0.0
	2013	16	13	81.3	16	100.0	0	0.0	0	0.0
	2014	16	14	87.5	16	100.0	0	0.0	0	0.0
Inland	2011	98	70	71.4	85	86.7	0	0.0	13	13.3
	2012	98	69	70.4	87	88.8	0	0.0	11	11.2
	2013	96	81	84.4	93	96.9	0	0.0	3	3.1
	2014	96	82	85.4	94	97.9	0	0.0	2	2.1
Total	2011	114	83	72.8	101	88.6	0	0.0	13	11.4
	2012	114	82	71.9	103	90.4	0	0.0	11	9.6
	2013	112	94	83.9	109	97.3	0	0.0	3	2.7
	2014	112	96	85.7	110	98.2	0	0.0	2	1.8

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 2014 bathing season in Lithuania**



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