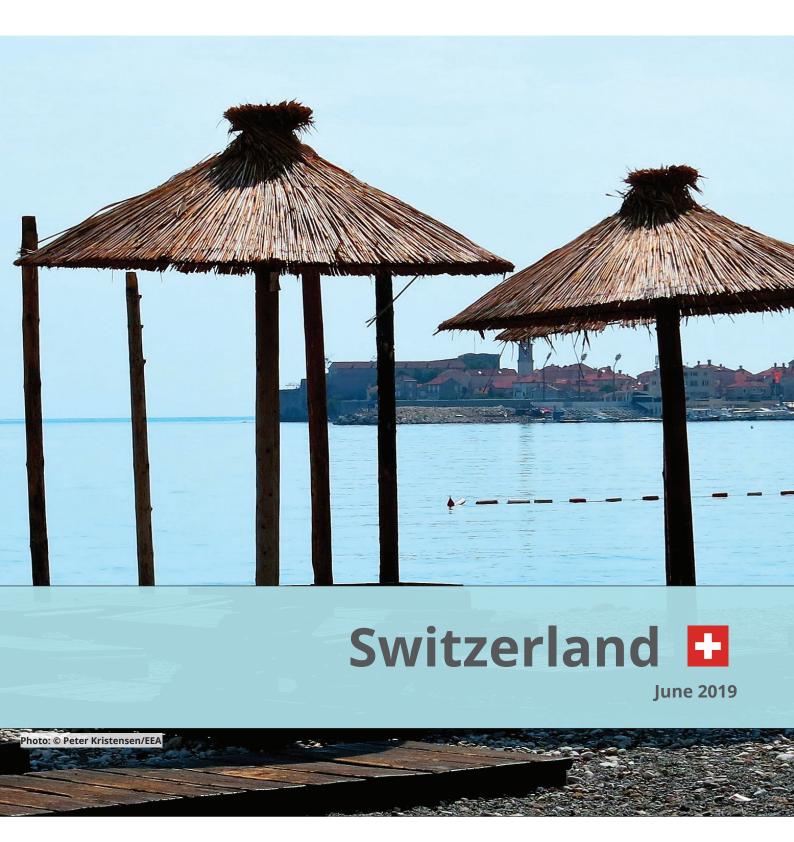
Swiss bathing water quality in 2018







Bathing Water Quality in the Season 2018

Switzerland

Under the provisions of the <u>Bathing Water Directive</u>, more than 21 000 bathing waters are monitored in Europe each season. The monitoring data and other information regarding bathing water management are reported to the European Environment Agency by 30 reporting countries in Europe, to be assessed for the annual European report and more detailed national reports.

1. BWD reporting in the season 2018

In the season 2018, Switzerland identified and reported **192 bathing waters**, which is 0.9% of all bathing waters in Europe. Four bathing waters in Switzerland have been newly identified for the season 2018.

Bathing waters of Switzerland in the season 2018		Bathing water quality in the season 2018			
		Excellent	144 (75%)		
Total reported	192	Good	10 (5.2%)		
Coastal	0	Sufficient	2 (1%)		
Inland	192	Poor	2 (1%)		
		Not classified	34 (17.7%)		
Total reported samples	828				

The bathing waters are quality classified according to the two microbiological parameters (Escherichia coli and Intestinal enterococci) defined in the Bathing Water Directive. 81.3% of reported bathing waters are in line with the minimum quality standards of the Directive, thus classified "sufficient" or better. Two bathing waters are of "poor" quality.

More detailed information on bathing waters of Switzerland is available at the national bathing water portal https://www.bafu.admin.ch/bafu/en/home/state.html .

2. BWD monitoring

Each bathing water that is identified by the reporting country needs to have a monitoring calendar established before the bathing season. The monitoring calendar requirements can be summarised as follows: (1) a pre-season sample is to be taken shortly before the start of each bathing season; (2) no fewer than four (alternatively, three for specific cases) samples are to be taken and analysed per bathing season; and (3) an interval between sampling dates never exceeds one month.

From the reported data, the assessment also designates effective implementation of the monitoring calendar. In Switzerland, monitoring calendar for 2018 according to the BWD provisions was not implemented at 86 bathing waters.

Table 1: Bathing waters in 2018 according to implementation of the monitoring calendar

	Count	Share of total [%]
Monitoring calendar implemented A bathing water satisfies monitoring calendar conditions listed above.	106	55.20%
Monitoring calendar not implemented A bathing water does not satisfy monitoring calendar conditions listed above. They may be quality-classified if enough samples are available in the last assessment period.	86	44.80%

In addition to the monitoring calendar, management specifics of the last assessment period of four years are also assessed. The status primarily indicates whether the complete dataset of four seasons is available, but also points out the reasons as to why the bathing waters do not have the complete last assessment period dataset. The latter may indicate developing conditions at the site – most importantly, whether the bathing water has been newly identified within the period, or any changes have occurred that are likely to affect the classification of the bathing water.

Table 2: Management specifics in the last assessment period of 2015–2018

	Count	Share of total [%]
Continuously monitored A bathing water has been monitored in each bathing season in the last assessment period.	174	90.60%
Newly identified A bathing water was identified for the first time within the last assessment period. Such status is assigned until the complete four-year dataset is available, i.e. for three years after the first reporting.	7	3.60%
Quality changes A bathing water was subject to changes described in BWD Art. 4.4 within the last assessment period. Such status is assigned until the complete four-year dataset of samples taken after changes took effect is available.	0	0%
Monitoring gap	11	5.70%



A bathing water was not monitored for at least one season in the last assessment period. No quality classification is made if no samples are reported for the most recent season.

3. Bathing water quality

3.1 Inland bathing waters

Inland bathing waters are situated at rivers and lakes, featuring fresh water and with respective parameter thresholds defined in Annex I of the Directive. Quality trend in Switzerland for the period 1990–2018 if historical data are available is shown in Figure 1. Count of bathing waters by quality class for the last assessment period 2015–2018 is given in Annex I.

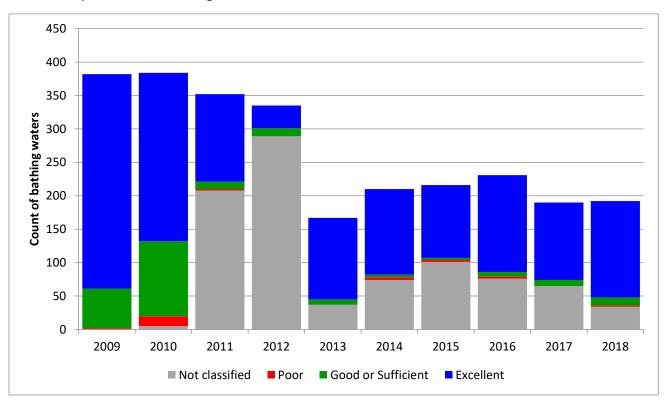


Figure 1: Trend of inland bathing water quality in Switzerland. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.



4. Bathing water management in Switzerland

In addition to monitoring data, reporting countries also provide information on bathing water management in the country. The information is used to exchange good practices, discuss issues on the European level, and understand the specifics of implementation of the Directive.

Due to various preventive measures and major efforts in waste water treatment over the last few decades, the bathing water quality of Swiss rivers and lakes has improved significantly; it is possible to bathe in lakes and rivers in Switzerland almost everywhere without any health risks. Only after heavy rainfall or during flooding is it advisable not to bathe in rivers. For the 2017 season, two short-term pollution events have been reported by the Swiss authorities.

In the case of rivers and streams which act as receiving water courses for waste water treatment plants, increased volumes of waste water may be introduced as a result of storm overflows and can adversely affect hygienic conditions.

In the case of bathing water of limited quality, in accordance with the Waters Protection Ordinance, the authorities must take measures such as better water protection, upgrading of wastewater treatment plants or closing direct discharges, or explicitly advising against bathing. It can therefore be assumed that there will be a positive development in the quality of bathing water in the future.



Annex I Bathing water quality in Switzerland in 2015–2018

Table 3: Bathing water quality by water category and season

		Total	Excellent		Good		Sufficient		Poor		Not classified	
	count of bathing waters	Count	%	Count	%	Count	%	Count	%	Count	%	
Total	2015	216	109	50.5	2	0.9	1	0.5	3	1.4	101	46.8
	2016	231	145	62.8	5	2.2	2	0.9	3	1.3	76	32.9
	2017	190	116	61.1	4	2.1	5	2.6	0	0.0	65	34.2
	2018	192	144	75.0	10	5.2	2	1.0	2	1.0	34	17.7



Annex II Bathing water quality map

Map 1: Bathing waters reported during the 2018 bathing season in Switzerland

