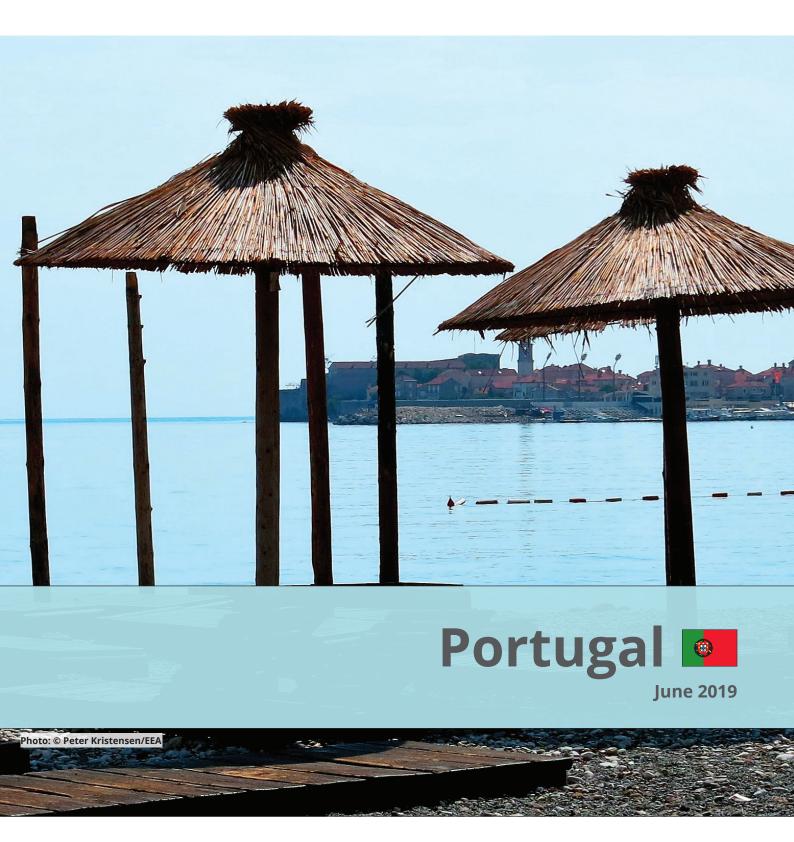
Portuguese bathing water quality in 2018







Bathing Water Quality in the Season 2018

Portugal

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, Portugal identified and reported **608 bathing waters**, which is 2.7% of all bathing waters in Europe. Eight bathing waters in Portugal have been newly identified for the season 2018. Three bathing waters reported in the preceding seasons have not been reported any more in 2018.

Bathing waters of Portugal in the se	ason 2018	Bathing water quality in the season 2018			
Total reported	608	Excellent	554 (91.1%)		
Coastal	480	Good	29 (4.8%)		
Inland	128	Sufficient	9 (1.5%)		
		Poor	2 (0.3%)		
Total reported samples	3864	Not classified	14 (2.3%)		

The bathing waters are quality classified according to the two microbiological parameters (*Escherichia coli* and Intestinal enterococci) defined in the Bathing Water Directive. 97.4% 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 Portugal is available at the national bathing water portals http://www.apambiente.pt/index.php?ref=19&subref=906, http://www.azores.gov.pt/Gra/SRMCT-MAR/menus/secundario/Zonas+Balneares/ (Azores) and https://www.madeira.gov.pt/drota/Estrutura/DROTA/ctl/Read/mid/1975/InformacaoId/18255/UnidadeOrganicald/14 (Madeira).



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 Portugal, monitoring calendar for 2018 was not implemented at one bathing water.

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.	607	99.8%	
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.	1	0.2%	

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 of the last assessment period.	564	92.8%
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.	44	7.2%
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 A bathing water was not monitored for at least one season in the last assessment period. No quality classification is made if not enough samples are reported	0	0%

3. Bathing water quality

3.1 Coastal bathing waters

Coastal bathing waters are situated on the sea or transitional water coastline, with respective parameter thresholds defined in Annex I of the Directive. They are subject to more strict thresholds than the inland bathing waters. Quality trend in Portugal 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.

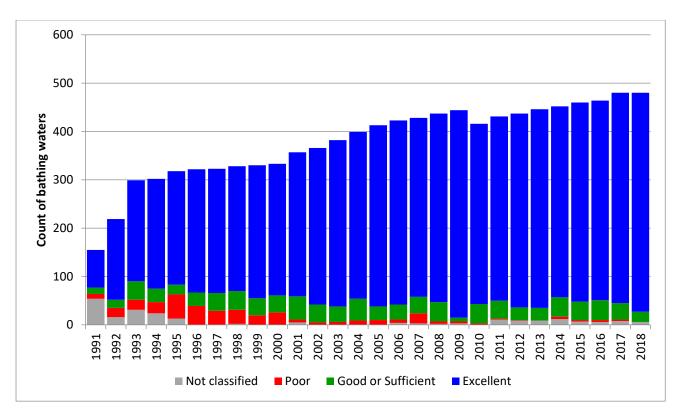


Figure 1: Trend of coastal bathing water quality in Portugal. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.

3.2 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 Portugal for the period 1990–2018 if historical data are available is shown in Figure 2. Count of bathing waters by quality class for the last assessment period 2015–2018 is given in Annex I.

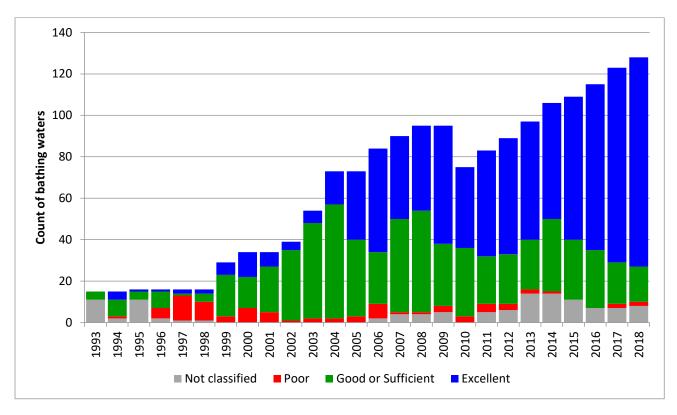


Figure 2: Trend of inland bathing water quality in Portugal. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.

4. Bathing water management in Portugal

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.

Management of bathing waters include information to the public, locally and online, the reinforcement of monitoring and surveillance actions, the control and improvement of urban wastewater systems, the public awareness, among other measures. Bathing waters with classification of sufficient or poor are subjected to reinforcement of monitoring. These measures were carried out by different institutions in articulation, at national, regional and local level, involving Environment, Health and Maritime authorities, as well as municipalities, taking into account bathing water profiles, but also specific conditions of the bathing season.

Following the quality classification "poor" obtained in 2017 (and because of the health risk for bathers), bathing waters "Zebreiros" and "Merelim S. Paio" were not identified as bathing waters in the 2018 bathing season. In this context, the of Northern Regional Health Delegate issued a permanent bathing prohibition. This permanent prohibition will last for at least one bathing season or until there is a sustained guarantee of improved quality of the water for bathing purposes.

There were 10 temporary bathing prohibitions in the 2018 bathing season issued by health authority (at bathing waters "Poços S. Vicente Ferreira", "Rainha (Cascais)", "Pintadinho", "Burgães-Rio Caima", "Praia d'el Rei", "Tábua", "Ponta Delgada", "Ponte da Barca", "Gorgulho" and "Alagoa") and several cases where advice against bathing was issued.

Due to strong rainfall which occurred on the 15th of July, in an area affected by wildfires and therefore the terrain lacked green cover, the runoff triggered from the slopes of the mountainous area conveyed stones, trees and other debris into the river bed, affecting a total of 13 bathing waters in two different rivers, river "Alva" and River "Ceira". The 13 bathing waters were affected with different severities. To ensure the safety of bathers, advices against bathing were issued by the respective River Basin Administration and information was placed in the proper locations near the bathing waters (firstly advices were issued and later some of them were extended). Debris removal works were undertaken; when these ended, samples were taken to evaluate the adequacy of water quality for bathing activities and for the withdrawal of the advice against bathing. In river "Ceira" for that purpose the affected bathing waters were sampled on the 23rd of July and in the affected bathing waters in river "Alva" on the 24th of July. Since results pointed to water quality being compatible with bathing activities, advices against bathing were withdrawn on the 24th of July and on the 26th of July, respectively. Additional samples were taken to replace the samples that were missing due to this situation. In river "Ceira" an additional sample was taken on the 25th of July and in river "Alva" an on the 27th of July. Under these circumstances, it was considered that abnormal situation could be applicable to these bathing waters, justifying the suspension of the monitoring calendar between the 15th and 24th of July in bathing water located in the river "Ceira" and between the 15th and 26th of July for bathing waters located in the river "Alva".

Information provision on the internet – Portugal Mainland and Autonomous Regions

The online provision of information on bathing water is performed by the Portuguese Environment Agency (APA), integrated in two websites: the APA official website and the site linked with the database. Besides, and concerning Autonomous Regions of Azores and Madeira, there are regional websites.

The APA official website located at http://www.apambiente.pt/index.php?ref=19&subref=906 presents information about the bathing water classification in previous years, as well as the European Environment Agency reports and a link to the information concerning 2018 bathing season.

Also available are sites of the Autonomous Region of Azores (http://www.azores.gov.pt/Gra/SRMCT-MAR/menus/secundario/Zonas+Balneares/; http://www.azores.gov.pt/Gra/SRMCT-MAR/conteudos/livres/Perfis+das%20%C3%81guas%20Balneares%20dos%20A%C3%A7ores.htm) and Autonomous Region of Madeira

(https://www.madeira.gov.pt//Portals/12/Documentos/Noticias/SITE_DROTA_aguas%20Balneares_Perfis_2_018.pdf).



Annex I Bathing water quality in Portugal in 2015–2018

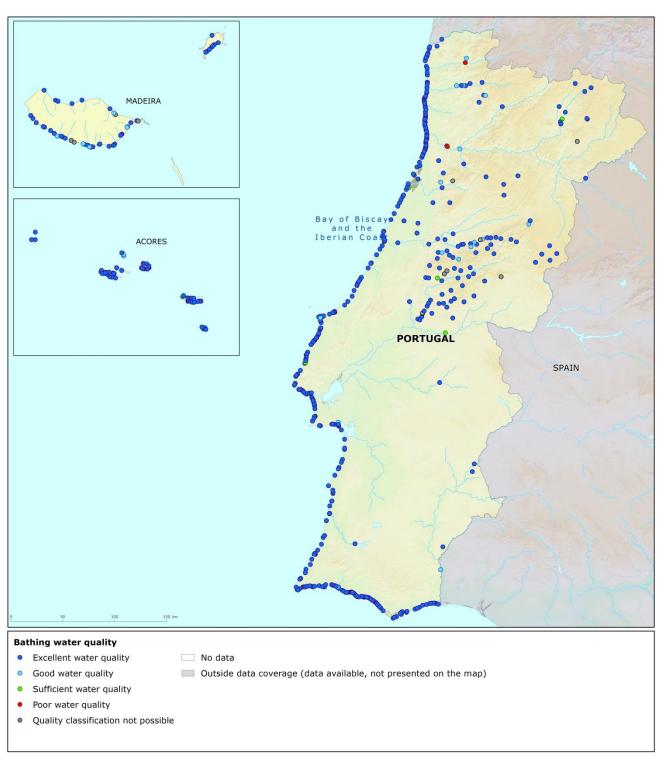
Table 3: Bathing water quality by water category and season

		Total	Exce	llent	Go	od	Suffi	cient	Po	or	Not cla	ssified
		count of bathing waters	Count	%	Count	%	Count	%	Count	%	Count	%
Coastal	2015	460	412	89.6	33	7.2	5	1.1	3	0.7	7	1.5
	2016	464	413	89.0	35	7.5	6	1.3	4	0.9	6	1.3
	2017	480	435	90.6	29	6.0	5	1.0	3	0.6	8	1.7
	2018	480	453	94.4	16	3.3	5	1.0	0	0.0	6	1.3
Inland	2015	109	69	63.3	22	20.2	7	6.4	0	0.0	11	10.1
	2016	115	80	69.6	21	18.3	7	6.1	0	0.0	7	6.1
	2017	123	94	76.4	17	13.8	3	2.4	2	1.6	7	5.7
	2018	128	101	78.9	13	10.2	4	3.1	2	1.6	8	6.3
Total	2015	569	481	84.5	55	9.7	12	2.1	3	0.5	18	3.2
	2016	579	493	85.1	56	9.7	13	2.2	4	0.7	13	2.2
	2017	603	529	87.7	46	7.6	8	1.3	5	0.8	15	2.5
	2018	608	554	91.1	29	4.8	9	1.5	2	0.3	14	2.3



Annex II Bathing water quality map

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



Source: National boundaries: EEA; Large rivers and lakes: EEA, WFD Article 3; Bathing waters data and coordinates: Portugese authorities; Digital Elevation Model over Europe (EU-DEM): EEA.