

# Austrian bathing water quality in 2018



**Austria** 

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Photo: © Peter Kristensen/EEA



## Bathing Water Quality in the Season 2018

# Austria

Under the provisions of the [Bathing Water Directive](#), 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, Austria identified and reported **263 bathing waters**, which is 1.2% of all bathing waters in Europe. No bathing waters in Austria have been newly identified for the season 2018.

Bathing waters of Austria in the season 2018		Bathing water quality in the season 2018	
<b>Total reported</b>	263	<b>Excellent</b>	256 (97.3%)
Coastal	0	<b>Good</b>	5 (1.9%)
Inland	263	<b>Sufficient</b>	0 (0%)
<b>Total reported samples</b>	1379	<b>Poor</b>	1 (0.4%)
		<b>Not classified</b>	1 (0.4%)

The bathing waters are quality classified according to the two microbiological parameters (Escherichia coli and Intestinal enterococci) defined in the Bathing Water Directive. 99.2 % of reported bathing waters are in line with the minimum quality standards of the Directive, thus classified “sufficient” or better. One bathing water is of “poor” quality.

More detailed information on bathing waters of Austria is available at the national bathing water portal <https://www.ages.at/themen/umwelt/wasser/badegewaesser/>.

## 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 Austria, monitoring calendar for 2018 was implemented at all bathing waters.

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

	Count	Share of total [%]
<b>Monitoring calendar implemented</b> A bathing water satisfies monitoring calendar conditions listed above.	263	100%
<b>Monitoring calendar not implemented</b> 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.	0	0%

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**

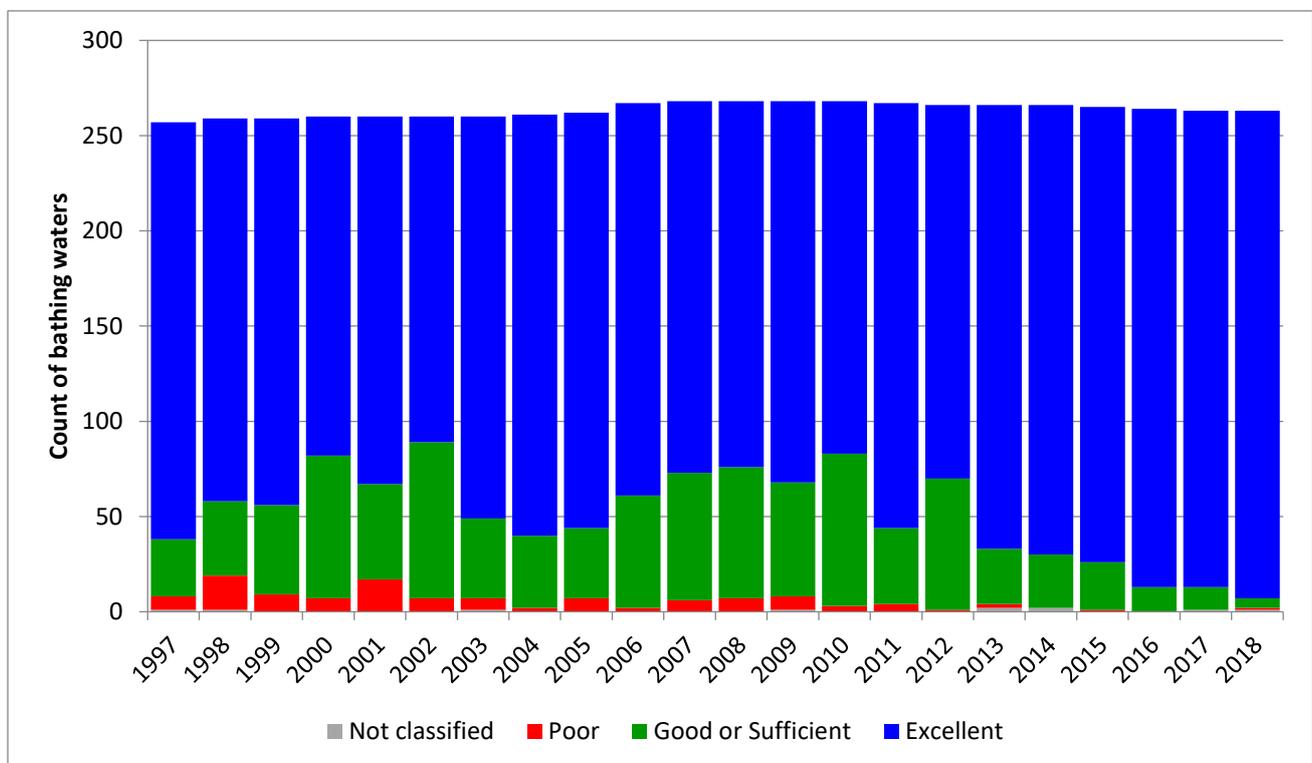
	Count	Share of total [%]
<b>Continuously monitored</b> A bathing water has been monitored in each bathing season in the last assessment period.	262	99.60%
<b>Newly identified</b> A bathing water was identified for the first time within the last assessment period. Such status is assigned until the complete four-year dataset is available, i.e. for three years after the first reporting.	1	0.40%
<b>Quality changes</b> 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%
<b>Monitoring gap</b> A bathing water was not monitored for at least one season in the last assessment period. No quality	0	0%

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 Austria 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 Austria.** 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 Austria

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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.

### Information for the public

Monitoring results on bathing water quality are made public through the media (primarily the local press, and occasionally local radio stations) and are also published online on the websites of the federal and provincial governments.

### Wastewater treatment

Measures to improve and guarantee the water quality for bathing waters were taken under the 1959 Austrian Water Act, before Austria became a member of the EU.

Eutrophication effects due to wastewater discharges into a number of Austrian lakes gave rise to remediation programs in the early 1970s. Since then, wastewater has been collected in ring-sewage systems and treated in at least biological wastewater treatment plants. Nowadays almost all treatment plants > 2.000 population equivalents even have a tertiary treatment for phosphorus and/or nitrogen removal as well. The treated effluent is discharged into rivers downstream of the lake in order to keep even the treated wastewater completely out of lakes.

The waste water treatment programs do not only have positive effects on lakes, but also on rivers and groundwater. Wastewater treatment plants must adhere to strict national standards on the removal of nutrients. Since 1959, over 47.2 billion € have been invested in the sewage systems and wastewater treatment plants. Around EUR 1.5 billion has been invested in restoring water quality in Austrian lakes.

The very stringent standards, which were set by the EU for waste water treatment in sensitive areas, are in place in the entire territory of Austria. With regard to the overall load entering all urban wastewater treatment plants the percentage of reduction by 31 December 2016 was 81 % for total nitrogen and 90% for phosphorus. Austria is thus fulfilling all the requirements of the Urban Waste Water treatment Directive (EU Directive 97/271/EEC).

The connection to public sewerage and treatment plants increased continuously up to 95.2 % (data status 2016). Furthermore the sewage systems and waste water treatment in small and scattered settlements are continued to be improved, whereas a shift of investments from new building to maintenance and renewal of old-established constructions is visible.

### Reduction of diffuse pollution sources

It has proved that compared to point sources, the process to reduce pollution from diffuse sources is much more difficult and therefore has shown less progress. Agriculture is a major diffuse pollution source despite the fact that Austria's almost exclusively organic, family-run farms use relatively low levels of fertilizers compared with many other Member States.

Austria's national strategies to reduce pollution from diffuse sources are based on:

- Action program according to the EU Nitrates Directive (91/676/EEC), which is implemented throughout Austrian territory; with the most recent revision, entered into force on 1 January 2018, areas have been designated where more stringent measures in terms of agricultural practices have to be applied;
- The Austrian Agri-Environmental Program ÖPUL 2015 provides financial incentives of about EUR 420 million a year for area related commitments to encourage environmentally friendly agriculture to help reducing pollution from diffuse sources. In areas with raised concentrations of nutrients and pollutants, i.e. a heightened risk of material pollution, targeted management practices for arable land and permanent grassland with low impact on the groundwater are supported.

In addition the National River Basin Management Plan (Nationaler Gewässerbewirtschaftungsplan) and its program of measures based on the EU Water Framework Directive (2000/60/EC) will contribute to reduce diffuse pollution as well.

### **Specific cases of increased values of monitored bacteria**

For the 2018 season, one bathing water (Badesee Gaishorn am See) in Austria has been assessed as “poor”. The quality of this bathing water has deteriorated from excellent in 2015, to good in 2016, sufficient in 2017 and finally to poor in 2018. The deteriorated in quality is a result of recent flood, which caused by a massive sludge which entered the bathing water.

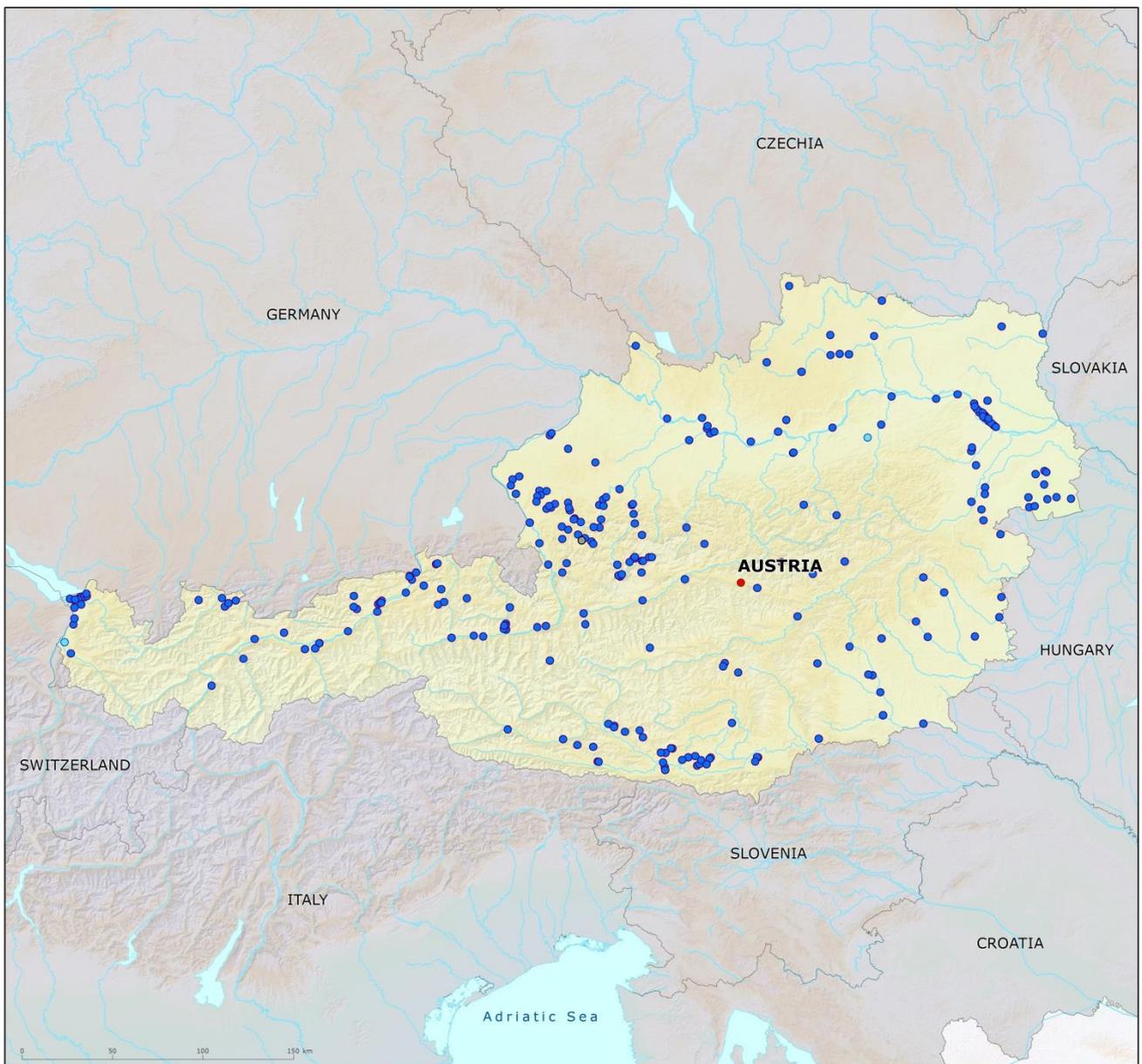
## Annex I Bathing water quality in Austria in 2015–2018

Table 3: Bathing water quality by water category and season

		Total count of bathing waters	Excellent		Good		Sufficient		Poor		Not classified	
			Count	%	Count	%	Count	%	Count	%	Count	%
Total	2015	265	239	90.2	24	9.1	1	0.4	1	0.4	0	0.0
	2016	264	251	95.1	11	4.2	2	0.8	0	0.0	0	0.0
	2017	263	250	95.1	10	3.8	2	0.8	0	0.0	1	0.4
	2018	263	256	97.3	5	1.9	0	0.0	1	0.4	1	0.4

## Annex II Bathing water quality map

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



**Bathing water quality**

- Excellent water quality
- Good water quality
- Sufficient water quality
- Poor water quality
- Quality classification not possible
- No data
- Outside data coverage (data available, not presented on the map)

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