

## Bathing Water Profile for Ayr (South Beach)

Ayr, Scotland

Current water classification <https://www2.sepa.org.uk/BathingWaters/Classifications.aspx>

Today's water quality forecast <http://apps.sepa.org.uk/bathingwaters/Predictions.aspx>

### Description

Ayr (South Beach) bathing water is a 3.5 kilometre long bay. It runs along the coastline from the River Ayr in the north to beyond the River Doon in the south. The beach is adjacent to the seaside town of Ayr.

The sandy beach slopes gently towards the water. Its golden sands are prized by locals. During high and low tides the approximate distance to the water's edge can vary from 25–700 metres.



### Site details

Local authority	South Ayrshire Council
Year of designation	1987
Water sampling location	NS 32964 21888
EC bathing water ID	UKS761604

### Catchment description

A catchment area of 930 km<sup>2</sup> drains into Ayr (South Beach) bathing water. Its topography varies from hills in the east to low-lying areas around the coastline and urban centres. The main rivers in the bathing water catchment are the River Ayr, River Doon and Slaphouse Burn.

Agriculture is the major land use in the catchment. Approximately half of the agricultural land is used as pasture for dairy cows. The upland areas support sheep and beef farming while the lowlands are used for intensive dairy farming. The catchment includes the main urban area of Ayr town as well as smaller towns and villages.

Average summer rainfall for the region is 392 mm compared to 331 mm across Scotland as a whole.

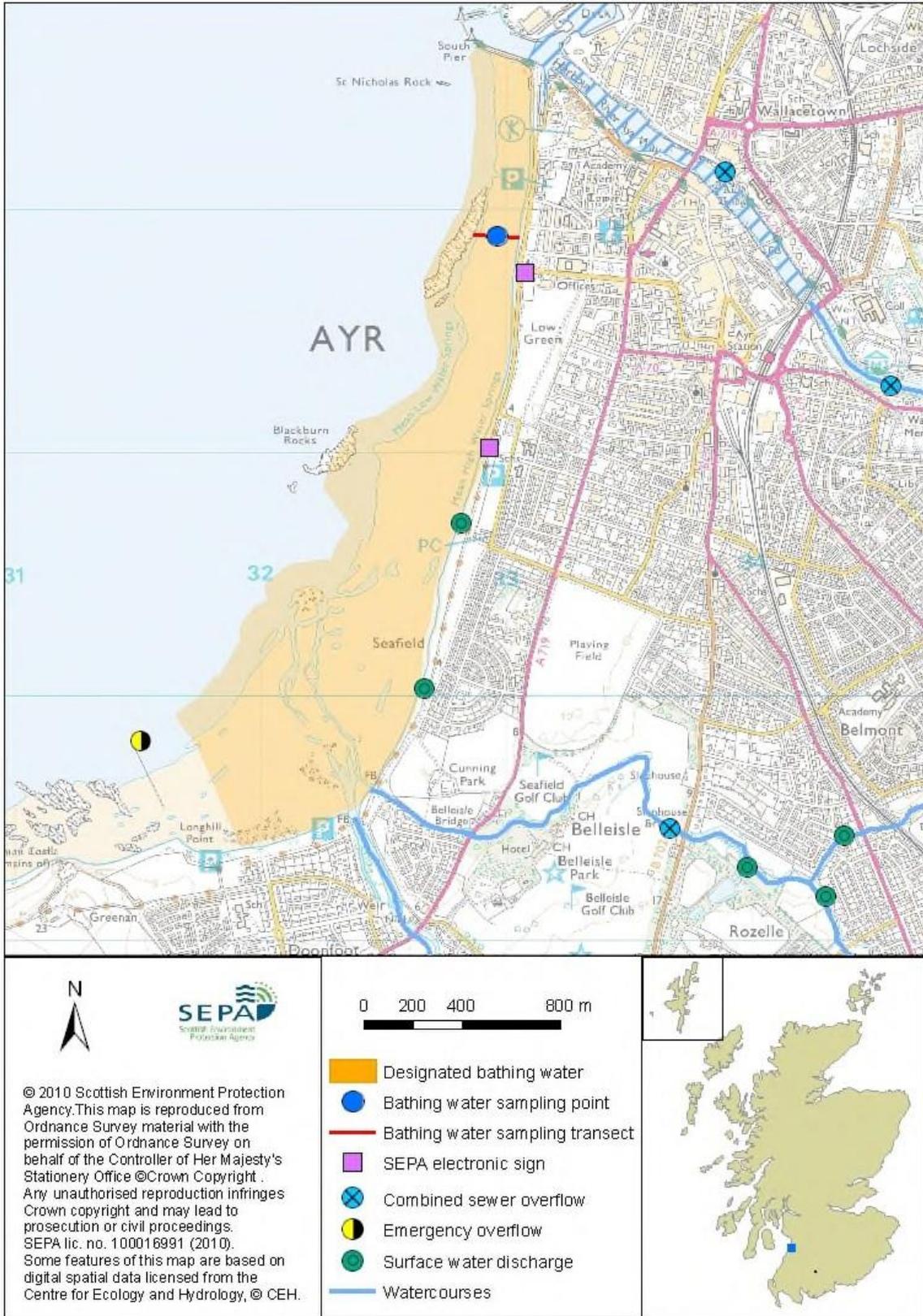
### Risks to water quality

This bathing water is subject to short term pollution when heavy rainfall washes faecal material into the sea. Pollution risks include agricultural run-off, sewer overflows and surface water discharges. These are highlighted on Map 1.

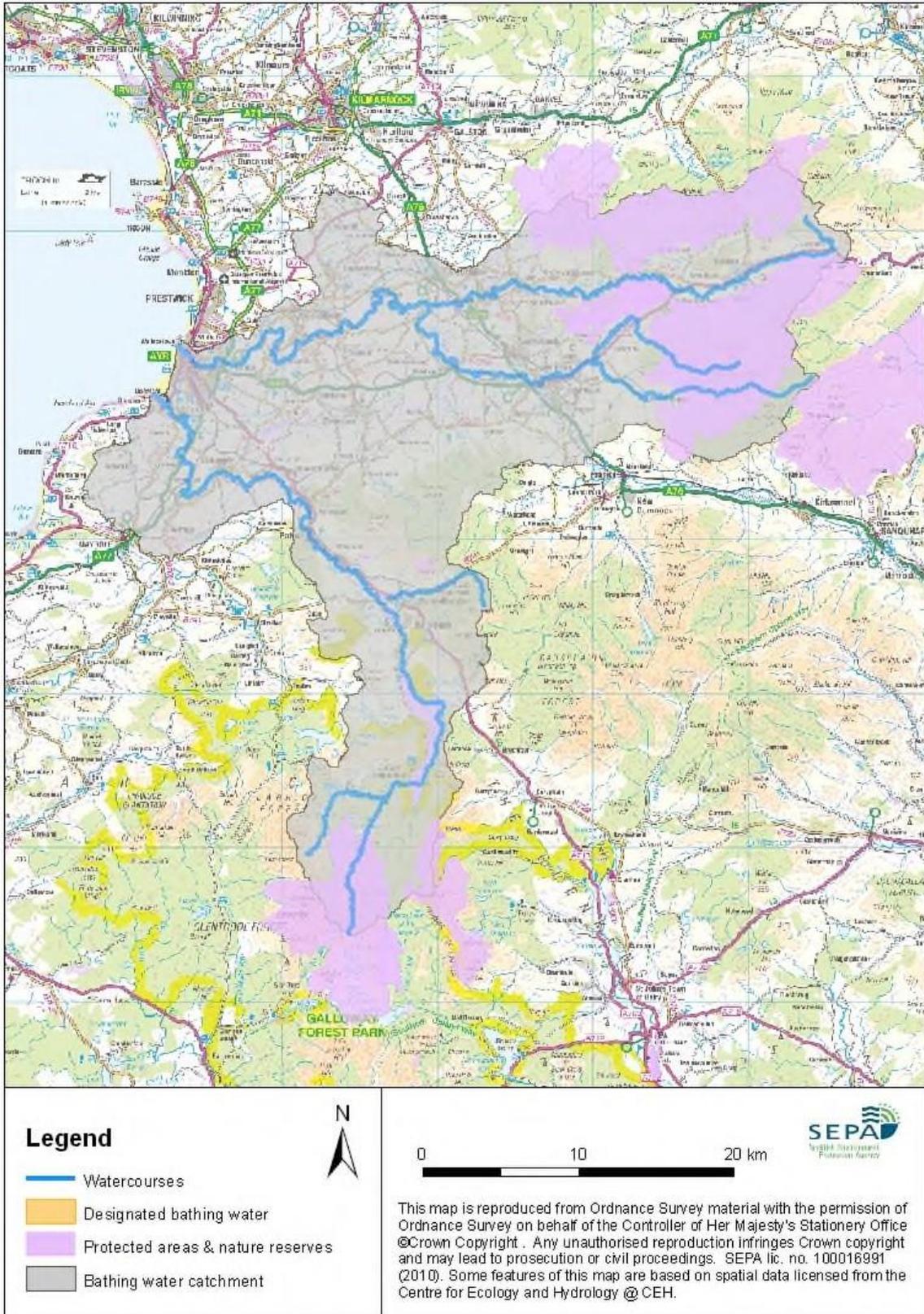
There is a risk that water pollution may occur after heavy rainfall. **Bathing is not advised during or 1-2 days after heavy rainfall. This is due to the risk to bathers' health from water pollution.**

DNA tracing indicates that human sources and animal sources are contributing to faecal pollution of the bathing water.

Map 1: Ayr (South Beach) bathing water



Map 2: Catchment draining into Ayr (South Beach) bathing water



## Daily water quality forecasts

Water quality is forecast on a daily basis during the bathing water season (1 June to 15 September). The forecasts indicate water quality is either acceptable or poor. Warnings against bathing are advised when poor water quality is forecast. This is because there is an increased risk to bathers' health from water pollution. Forecasts are communicated via electronic message signs at the beach, SEPA's website, mobile website and Beachline (03000 996699).

## Improving bathing water quality

### Improving diffuse pollution from agricultural sources

Diffuse pollution from agricultural sources is the result of cumulative inputs of pollutants to rivers and streams.

Pollution from agricultural run-off can occur in the River Ayr, the River Doon and, to a lesser extent, in the Slaphouse Burn. This is a risk to Ayr (South Beach)'s bathing water quality, particularly during and after periods of wet weather.

In recent years, rural land managers in catchments across Ayrshire have made many improvements to reduce diffuse pollution. There has been significant capital expenditure resulting in many rural land managers going beyond regulatory compliance to address issues arising from their farming activities.

Inspections have confirmed that the Ayr catchment is nearly all fully compliant with GBRs. Follow-up visits by SEPA will remain an important way to maintain this excellent progress, as will continued engagement with relevant parties to promote good practice.

### Improving pollution from sewage and other discharges

Scottish Water provides most waste water collection and treatment services in Scotland. Sewage from Ayr is pumped to the sewage treatment works at Irvine before it is discharged into the Firth of Clyde. No sewage is discharged into Ayr bay under normal weather conditions. Under heavy rainfall conditions, storm sewage may be discharged from Ayr pumping station to the sea via a long outfall. Combined sewer overflows may discharge weak storm sewage to rivers and streams. In emergency circumstances, sewage may be discharged from overflows associated with Ayr pumping station.

During 2020/21, Scottish Water completed substantive new capital improvement works which were brought into operation prior to the 2021 bathing season. This included increased storage capacity at two wastewater treatment works (WwTW) in Ayrshire (Drongan and Mauchline), and at a key urban combined sewer overflow asset (Bellisle CSO).

Agreement was also reached with Scottish Water to install temporary chemical dosing to disinfect the final effluent at a small septic tank at Minishant. Scottish Water also committed to operating the public sewerage network to achieve the best possible standards through a proactive inspection and maintenance programme. SEPA carries out increased regulatory checks in the area to identify any potential issues.

Elevated bacterial concentrations have been observed at various surface water outfalls in Ayr, indicating significant bacterial contamination within the surface water drainage systems. Multiple measures were agreed with Scottish Water to address these issues. Scottish Government funding enabled work to be carried out to fix misconnections within the sewerage system, however some issues still need to be resolved.

### Improving pollution from diffuse urban sources

Urban diffuse source pollution comes from contaminated rainwater discharging to rivers and streams. The River Doon, River Ayr and the Slaphouse Burn may be impacted by urban diffuse pollution. This potentially impacts on bathing water quality at Ayr (South Beach). SEPA are monitoring the impact of surface water outfalls on these watercourses.

SEPA, local authorities and Scottish Water are working together to tackle urban diffuse pollution. Sustainable Urban Drainage Systems (SUDS) have been incorporated into local plans and partner organisations have been

encouraged to retrofit SUDS where possible.

“My Beach Your Beach” a Scottish Government funded a project provided by Keep Scotland Beautiful (KSB) is operating at Ayr. This project raises beach user and local community/business awareness to reduce pollution from gulls, dogs, and litter.

### **Cyanobacteria (blue-green algae)**

Marine waters are not at risk of cyanobacteria overproduction.

### **Algae**

Current information suggests that this bathing water is not at risk of excessive growth of macroalgae (seaweed) or phytoplankton.

### **Jellyfish**

There is a possibility of increased numbers of jellyfish in the water during summer months. This is a naturally occurring phenomenon. Most species common to the UK are harmless. The Marine Conservation Society advises to ‘look but don’t touch’.

### **Responding to pollution incidents**

Please use our 24 hour hotline (0800 80 70 60) to report pollution. SEPA will investigate the incident and contact other relevant organisations. That may include Scottish Ministers, Scottish Water, the local authority and the relevant health board. Where necessary, measures will be put in place to resolve the problem.

If beach users or bathers are considered to be at risk, the local authority will warn the public by erecting signs at the bathing water. Information will also be available on our website.

SEPA will investigate whenever our sampling identifies pollution. Further sampling of the bathing water and related rivers and streams is undertaken.

Beach users are encouraged to use the bins provided or to take litter home. Beach cleaning and litter clean-up is maintained by South Ayrshire Council for this bathing water.

Keep Scotland Beautiful’s “My Beach Your Beach” campaign to help keep beaches and bathing waters clean for all to enjoy is underway at this location.

Contact details and information sources

<p><b>SEPA Ayr office</b>          31 Miller Road          Ayr          KA7 2AX          01292 294 000  <a href="http://www.sepa.org.uk">www.sepa.org.uk</a></p>	<p><b>South Ayrshire Council</b>          Burns House, Burns Statue Square          Ayr          KA7 1UT          01292 618222  <a href="mailto:environmental.health@south-ayrshire.gov.uk">environmental.health@south-ayrshire.gov.uk</a>  <a href="http://www.south-ayrshire.gov.uk">www.south-ayrshire.gov.uk</a></p>	<p><b>Keep Scotland Beautiful</b>          01786 471333  <a href="mailto:beach@ksbscotland.org.uk">beach@ksbscotland.org.uk</a>  <a href="http://www.keepsotlandbeautiful.org">www.keepsotlandbeautiful.org</a></p>
<p><b>Scottish Government</b>          Victoria Quay, Edinburgh, EH6 6QQ          0131 244 0396  <a href="mailto:eqcat@scotland.gsi.gov.uk">eqcat@scotland.gsi.gov.uk</a>  <a href="http://www.scotland.gov.uk/Topics/Environment/Water/15561/bathingwaters">www.scotland.gov.uk/Topics/Environment/Water/15561/bathingwaters</a></p>		

<b>Version number:</b>	<b>Date:</b>	<b>Next review due:</b>
1.1	April 2013	
1.2	April 2014	
1.3	May 2015	
1.4	May 2016	
1.5	May 2017	
1.6	June 2018	
1.7	March 2019	
1.8	April 2020	
1.9	March 2020	
1.9	May 2022	