

# Bathing Water Profile for Irvine

Irvine, Scotland

Current water classification is **Poor**.

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



## Description

Irvine bathing water extends 2.5 km along the front of the town of Irvine. The beach is very popular with locals and summer visitors. The southern end of the beach is adjacent to Glasgow Gailes Golf Club.

During high and low tides, the approximate distance to the water's edge can vary from 30–240 metres. For local tide information see: <http://easytide.ukho.gov.uk/EasyTide/>



Photograph provided courtesy of North Ayrshire Council

## Site details

Local authority	North Ayrshire Council
Year of designation	1987
Water sampling location	NS 30700 37499
EC bathing water ID	UKS7616028

## Catchment description

The catchment area draining into the Irvine bathing water extends to approx. 732 km<sup>2</sup>. It comprises of rolling countryside with a low-lying coastal plain to the west and hills with elevations between 200–500 metres to the north and east. The main urban area is of much lower elevations (average of 10–20 metres).

The catchment is predominantly rural with agriculture the major land use. The upland areas support beef and sheep farming while the middle and lower catchment supports intensive dairy farming. A small portion of the bathing water catchment is urban. The main towns are Kilwinning, Irvine and Kilmarnock. There is some large-scale commercial and smaller scale industrial activity concentrated within the lower reaches of the River Irvine.

There are several protected areas within the bathing water catchment. This includes Special Areas of Conservation, Special Protection Areas and Sites of Special Scientific Interest (SSSI).

## Risks to water quality

This bathing water is subject to short term pollution when heavy rainfall washes faecal pollutants into the sea. Pollution risks include agricultural run-off, sewer overflows and surface water discharges. See 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.**

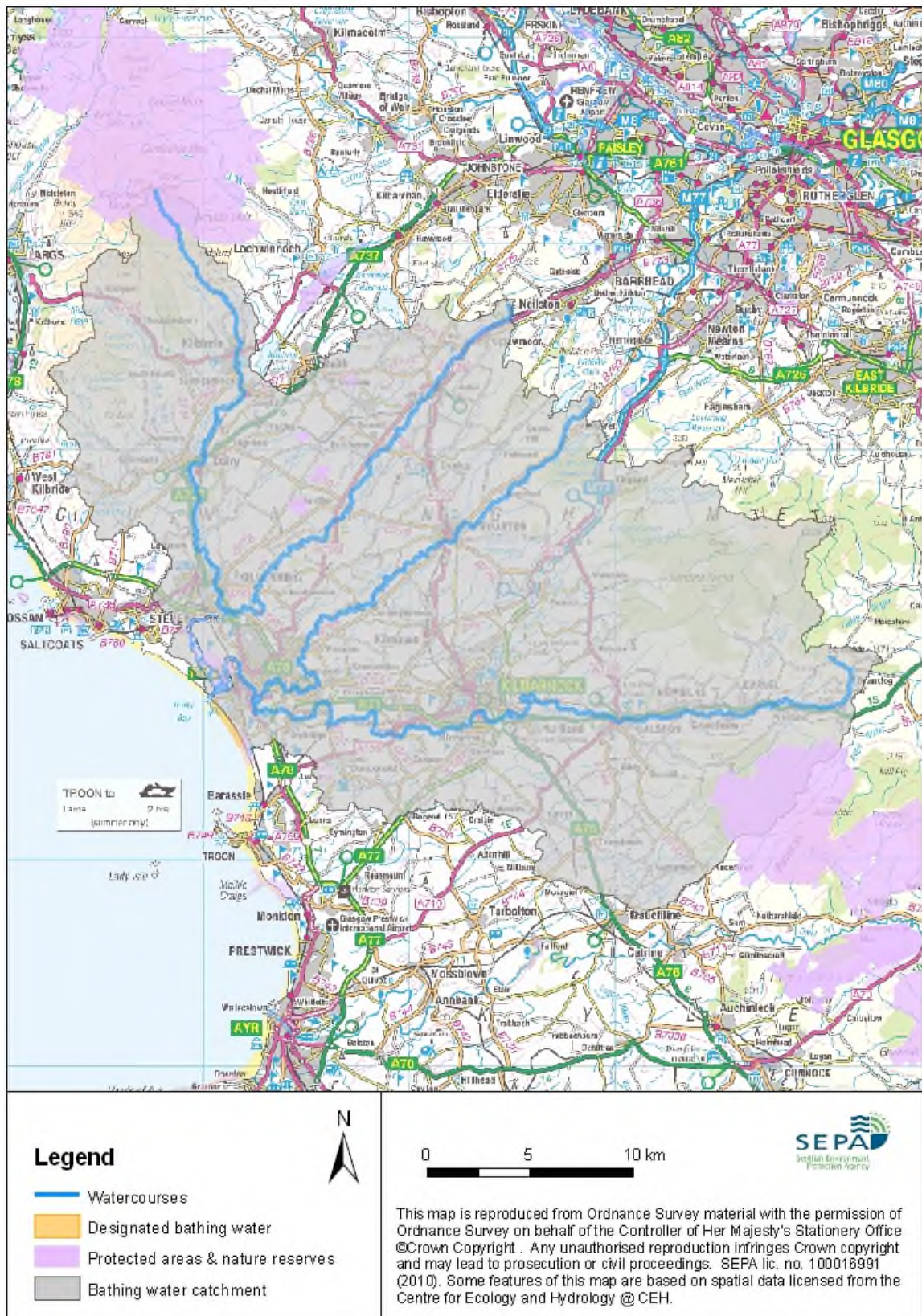
DNA tracing indicates that human sources and animal sources are contributing to faecal pollution of the bathing water.

**Map 1: Irvine bathing water**





Map 2: Catchment draining into Irvine bathing water



## **Daily water quality forecasts**

Water quality is forecast on a daily basis during the bathing 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 and Beachline (08452 30 30 98).

## **Improving bathing water quality**

### **Improving diffuse pollution from agricultural sources**

Diffuse pollution from agricultural sources is the cumulative effect of pollutants from several different sources.

There are more than 400 farms in the catchment draining to the Irvine bathing water. Most are dairy units with some sheep and beef farms in the upland areas. Pollution from agricultural run-off is thought to occur in both the Rivers Garnock and Irvine.

Work began in the Ayrshire Priority Catchments in 2010 to identify pollution risk hotspots. Awareness raising of diffuse pollution risks and implementation of measures has been carried out. Measures include: provision of buffer strips between agricultural activity and watercourses, increased slurry storage facilities to enable more efficient use of fertilisers, reduced run off from farm steadings and land, prevention of livestock access to rivers and burns and provision of alternative livestock watering. Re-visits to check compliance with relevant regulations took place in 2015.

### **Improving pollution from sewage and other discharges**

Scottish Water provides most waste water collection and treatment services in Scotland.

Combined sewer overflows can have a significant impact on the water quality at Irvine beach. These discharges only normally occur as a result of rainfall. Most of the overflows are situated beside rivers in the towns of Irvine and Kilmarnock.

Scottish Water completed the construction of a £50million storm sewage overflow improvement scheme to significantly reduce storm sewage quantities discharged to the River Irvine. The storm sewage interceptor system in Irvine was brought on line in December 2012. The equivalent system serving Kilmarnock was completed in late 2013. Minor improvements were made to the new storm sewage interceptor system in Irvine and Kilmarnock during 2014.

Scottish Water has also undertaken a study of Irvine bathing water. It indicated that Gales Pumping Station required investment. This was to enable the bathing water to achieve the water quality standards in the revised Bathing Waters Directive.

### **Improving pollution from diffuse urban sources**

Urban diffuse source pollution comes from contaminated rainwater discharging to rivers and streams. The River Irvine and River Garnock are both affected by urban run.

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.

## **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 overproduction of macroalgae (seaweed) or phytoplankton. However, at any time of the year and particularly after storms, a considerable amount of seaweed can become stranded on the beach. Under the right conditions accumulated seaweed can rot producing grey/black fluid. The rotting seaweed can also generate offensive odours. This is an entirely natural process.

## 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 807060) 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.

## Contact details and information sources

<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>	<b>North Ayrshire Council</b> Cunninghame House Irvine KA12 8EE. 0845 603 0590 <a href="mailto:contactus@north-ayrshire.gov.uk">contactus@north-ayrshire.gov.uk</a> <a href="http://www.north-ayrshire.gov.uk">www.north-ayrshire.gov.uk</a>	<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>
<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>		

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