


Bathing water profile:

Arbroath (West Links)

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| <p>Bathing water: Arbroath (West Links)</p> |  |
| <p>EC bathing water ID number: UKS761603</p> | |
| <p>Location of bathing water: UK/Scotland/Angus (Map1)</p> | |
| <p>Year of designation: 1987</p> | |
| <p>Bathing water description</p> <p>The Arbroath (West Links) bathing water is a 1.3 km sandy bay situated to the south west of the town of Arbroath in Angus (Map 1). It was designated as a bathing water in 1987.</p> <p>During high and low tides the approximate distance to the water's edge can vary from 20–200 metres. The sandy beach slopes gently towards the water. For local tide information see: http://easytide.ukho.gov.uk/EasyTide/index.aspx</p> <p>The beach is popular with walkers and families due to the provision of a coastal footpath and the close proximity of a recreational area.</p> <p>Our monitoring point for taking water quality samples is located at the eastern end of the designated area (Grid Ref NO 6351 3998) as shown on Map 1.</p> | |
| <p>Monitoring water quality</p> <p>Please visit our website¹ for details of the current EU water quality classification and recent results for this bathing water.</p> <p>During the bathing season (1 June to 15 September), designated bathing waters are monitored by SEPA for faecal indicators (bacteria) and classified according to the levels of these indicators in the water. The European standards used to classify bathing waters arise from recommendations made by the World</p> | |

¹ <http://apps.sepa.org.uk/bathingwaters/>

Health Organisation and are linked to human health. More information on bathing water monitoring, health and classification can be found on our [website](#)².

Risks to water quality

In general, most natural waters will be affected to some extent during and following rainfall as pollutant loads may be increased due to run-off from agricultural or urban land in the catchment. In addition, at some locations waste water discharges from combined sewer overflows, which then drain into the bathing water and can reduce water quality.

Faecal pollutants can come from human sewage, farming activities and livestock (e.g. cattle, sheep), industrial processes, surface water urban drainage, domestic animals (e.g. dogs) and wildlife (e.g. birds) and can enter bathing waters via:

- direct discharges into the marine environment at, or in the vicinity of, the beach;
- the freshwater network draining into a bathing water, which can be prone to elevated bacterial levels as a result of diffuse pollution and/or point source inputs upstream.

The potential relevant pollution sources at, or near, this bathing water are highlighted on Map 1.

It is considered likely that the principal risks and source of wet weather driven short term pollution at this bathing water arise from combined sewer overflows. These events are expected to last 1-2 days depending on the duration of the rainfall and may result in elevated bacteria levels compared to dry conditions.

Our regulatory and scientific assessment indicates that potential sources of short-term faecal indicator pollution at this bathing water can at times originate from human or animal sources.

Bathing is not advisable during or following (one or two days after) rainfall. Bathing or swimming after storms, floods or heavy rainfall should be avoided as the risk of illness following short term water pollution is increased.

Cyanobacteria (blue-green algae)

Marine waters are not at risk of excessive production of cyanobacteria.

Algae

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

Jellyfish

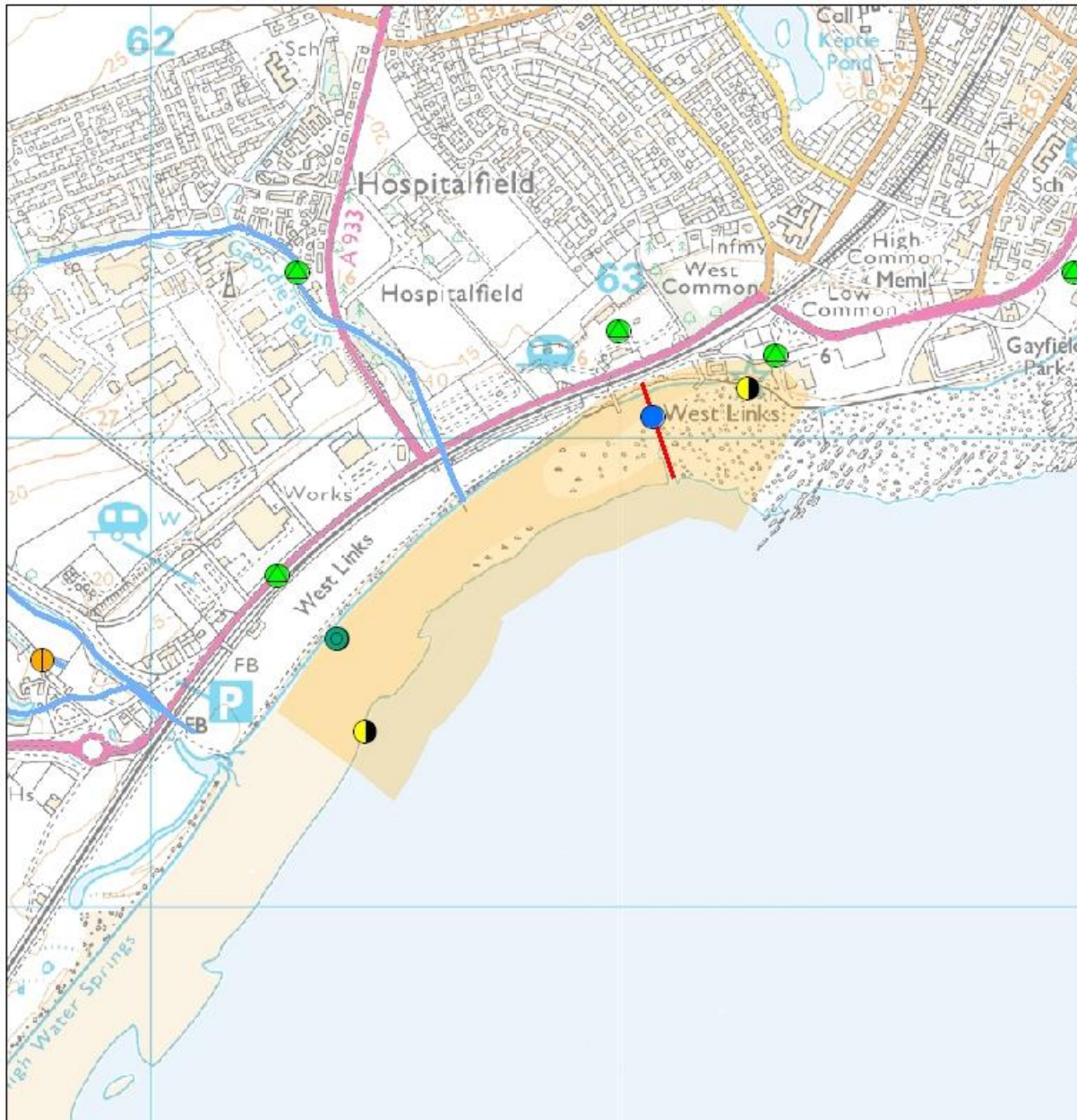
There is a possibility of increased numbers of jellyfish in the water during the summer months. This is a naturally occurring phenomenon. Although there are a few stinging species common to the UK, most are harmless. The Marine Conservation Society advises to 'look but don't touch'.



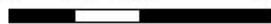









Daily water quality forecasts

Arbroath (West Links) bathing water is not part of our signage network. Daily water quality predictions are not currently required for this bathing water.

² <http://apps.sepa.org.uk/bathingwaters/SamplingResults.aspx>

Map 1: Arbroath (West Links) bathing water



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|   | <p>0 125 250 500 m</p>  |  |
| <p>© 2010 Scottish Environment Protection Agency. This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office ©Crown Copyright. Any unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. SEPA lic. no. 100016991 (2010). Some features of this map are based on digital spatial data licensed from the Centre for Ecology and Hydrology, © CEH.</p> | <ul style="list-style-type: none">  Designated bathing water  Bathing water sampling point  Bathing water sampling transect  Sewage effluent discharge  Emergency overflow  Surface water discharge  Sewage pumping station  Watercourses | |

Map 2: Catchment draining into Arbroath (West Links) bathing water



Catchment description

The catchment draining into the Arbroath (West Links) bathing water extends to 44 km². It varies in topography from low-lying areas (average elevation 5 metres) along the coast to low hills (max elevation 190 metres) in the west.

The catchment is predominantly rural (96%) with arable agriculture (including a small amount of soft fruit production) the major land use. There is also some beef and sheep farming in the area. Approximately 4% of the bathing water catchment is urban; the main urban area being the south-western part of the town of Arbroath. There are also a number of other small towns within the catchment.

Average summer rainfall for the region is 321 mm compared to 331 mm across Scotland as a whole.

The main rivers within the bathing water catchment are the Elliot Water and its tributaries (Rottenraw Burn and Black Burn), the Geordies Burn and the Brothock Water.

The Elliot Links Site of Special Scientific Interest (SSSI), designated for its sand dunes, is located within the bathing water catchment (see Scottish Natural Heritage's [information service website](#)³ for more information). This protected area is not considered to pose a threat to bathing water quality.

The Elliot Water was designated under the Freshwater Fish Directive in 1992 and the Strathmore/Fife area was designated as a Nitrate Vulnerable Zone in 2002.

Measures to improve bathing water quality

High quality bathing waters are important so that people can enjoy Scotland's environment safely. They are also important for Scotland's tourism industry.

Recent years have seen considerable improvements in Scotland's bathing water quality, not least due to substantial investment in the sewerage system. SEPA and our partners are fully committed to continuing to improve bathing water quality.

Improving diffuse pollution from agricultural sources

Diffuse pollution from agricultural sources is normally the result of cumulative inputs of pollutants from several different sources on farms within the catchments draining to the bathing water. Consequently, tackling diffuse agricultural pollution requires concerted action across catchments. We will ensure this by working with farmers to raise awareness about the requirement to prevent and reduce pollution, and to help them identify appropriate actions for doing so.

To help co-ordinate our work to encourage and ensure action, SEPA participate in the [Diffuse Pollution Management Advisory Group](#)⁴ (DPMAG), which is a partnership of relevant authorities, land manager representatives and voluntary organisations.

The Scottish Government has also brought together nine public bodies to form [Scotland's Environmental and Rural Services](#)⁵ (SEARS). This partnership will contribute to implementing plans for tackling diffuse pollution by providing co-ordinated education and advice to rural land managers.

Additional targeted efforts will be made to improve management of diffuse pollution within catchments identified as 'priority' catchments. These are catchments where the scale of the pollution reduction needed will require planned and targeted actions to be identified and discussed with farmers concerned. Assistance will be given in these areas to identify pollution hotspots, and one-to-one advice will be provided on following the agricultural codes of good practice, which in themselves lead to compliance with these regulations. Action in priority catchments will be phased.

The arable agriculture in this catchment is not considered to have a significant impact on bacterial water quality at the bathing water.

³ www.snh.org.uk/snhi

⁴ <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/dpmag/>

⁵ www.sears.scotland.gov.uk

Improving pollution from sewage and other discharges

Most waste water collection and treatment services in Scotland are provided by Scottish Water. It has invested substantially in waste water collection and treatment provision over recent years to protect public health and the environment. Public investments in the sewerage network and in treatment works will continue to be co-ordinated through the national investment and planning process for Scottish Water, known as 'Quality and Standards'.

Substantial improvement in water quality at Arbroath bathing water has been since the 1990s. The improvement has been linked to the pumping of local sewage to Hatton sewage treatment works, which was commissioned in 2001. At the same time, the sewage treatment works at Inchcape was converted to a pumping station and storm sewage storage was provided. Screening was added to the two existing outfalls which have been retained for use as a combined sewer overflow and an emergency overflow. There are combined sewage overflows and/or emergency overflows at four other smaller pumping stations in the area.

Our environmental improvement action plan monitoring of Elliot Water identified elevated faecal coliform levels arising from discharges from nearby septic tanks. In August 2004 these discharges were diverted to a soakaway.

Improving pollution from diffuse urban sources

Urban diffuse source pollution comes from rainwater falling onto urban areas (roads, pavements, yards and roofs) becoming contaminated with pollutants on those areas, washing into surface water drains and discharging from those drains to the water environment.

Tackling this type of pollution requires substantial changes in the way urban areas are drained, and efforts to reduce the quantity of pollutants deposited on urban surfaces. Since the mid 1990s, Sustainable Urban Drainage Systems (SUDS) have increasingly been used to drain new developments. They are designed to avoid pollution of the water environment and include permeable surfaces that allow infiltration of rainwater into the ground, slowing the rate at which it drains to the water environment and trapping and breaking down pollutants. Artificial ponds or wetlands provide a final stage of treatment. Local authorities, Scottish Water and SEPA are working together to co-ordinate efforts to tackle pollution from diffuse urban sources, incorporating SUDS into local plans and encouraging partner organisations to retrofit SUDS where possible.

Diffuse urban pollution is not believed to affect this bathing water.

Responding to pollution incidents

Although rare, pollution incidents affecting bathing water quality can happen. Pollution incidents tend to be unpredictable, for example a slurry spill or sewage network failure, and can result in elevated levels of faecal indicators.

To report a possible pollution incident please use our 24 hour pollution hotline (0800 807060). In response we 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.

Whenever our routine sampling of bathing waters identifies elevated levels of faecal indicators there is an immediate response to check all relevant potential sources and major discharges in the immediate catchment, as well as our hydrometric information to determine whether the levels may be due to high river flows. Follow-up microbiology sampling is also undertaken of the bathing water and local water courses.

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](#)⁶.

Other pollutants at the beach may include plastics and litter. Beach users are encouraged to use the bins provided or to take litter home. Beach cleaning and litter clean-up is maintained for this bathing water by Angus Council.

⁶ <http://apps.sepa.org.uk/bathingwaters/Predictions.aspx>

Contact details and sources of more information

SEPA Arbroath office

62 High Street
Arbroath
DD11 1AW
01241 874370
www.sepa.org.uk

Pollution Hotline

0800 80 70 60
24 hours per day, seven days per week

Keep Scotland Beautiful

01786 471333
beach@ksbscotland.org.uk
www.keepsotlandbeautiful.org

Angus Council

Angus House
Orcharbank Business Park
Forfar
DD8 1AX
08452 777 778
accessline@angus.gov.uk
www.angus.gov.uk

Scottish Government

Victoria Quay
Edinburgh
EH6 6QQ
0131 244 0396
eqcat@scotland.gsi.gov.uk
www.scotland.gov.uk/Topics/Environment/Water/15561/bathingwaters

Further information about the condition of our water environment and the actions needed to deliver improvement can be found in:

- the Scotland river basin management plan
<http://www.sepa.org.uk/environment/water/river-basin-management-planning/>
- the Tay area management plan <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/tay/>

Good Beach Guide: www.goodbeachguide.co.uk

Blue Flag and Seaside Awards: www.keepsotlandbeautiful.org/coastal

Version Control

| Version number: | Date: | Next review due: |
|-----------------|------------|------------------|
| 1.0 | Nov 2010 | |
| 1.1 | March 2014 | |
| 1.2 | June 2015 | |