


Bathing water profile:

Brighthouse Bay

<p>Bathing water: Brighthouse Bay</p>	
<p>EC bathing water ID number: UKS761606</p>	
<p>Location of bathing water: UK/Scotland/Dumfries and Galloway (Map1)</p>	
<p>Year of designation: 1999</p>	
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<p>Bathing water description</p> <p>Brighthouse Bay bathing water is a small, sheltered, sandy beach interspersed with rocky outcrops. The bay is about 300 metres wide, 600 metres long, and situated on the south coast of Dumfries and Galloway. It is close to the village of Borgue and adjacent to Brighthouse Bay Golf and Leisure Club (Map 1). It was designated as a bathing water in 1999.</p> <p>During high and low tides the approximate distance to the water's edge can vary from 0–600 metres, however as this beach sits on a transitional water, mud flats are exposed at low tide making the waters edge difficult to access in certain areas. For local tide information see: http://easytide.ukho.gov.uk/EasyTide</p> <p>The beach is popular in particular with wildlife enthusiasts, dog walkers and tourists from the nearby holiday cottages.</p> <p>Our monitoring point for taking water quality samples is located midway along the designated area (Grid Ref NX 63516 45472) 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>	

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

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 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.

There are no direct discharges to the bathing water.

The principal risks and source of wet weather driven short term pollution at this bathing water arise from diffuse agricultural run-off. These events are expected to last one or two 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 overproduction of cyanobacteria.

Algae

Current information suggests that this bathing water is at risk of excessive growth of macroalgae or phytoplankton, including the occasional red tide. At any time of the year and particularly after storms a considerable amount of macroalgae (seaweed) can become stranded on the beach. This is an entirely natural phenomenon. Accumulated seaweed under the right conditions can rot and this can result in the production of a grey/black fluid. The rotting seaweed can also generate offensive odours.

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

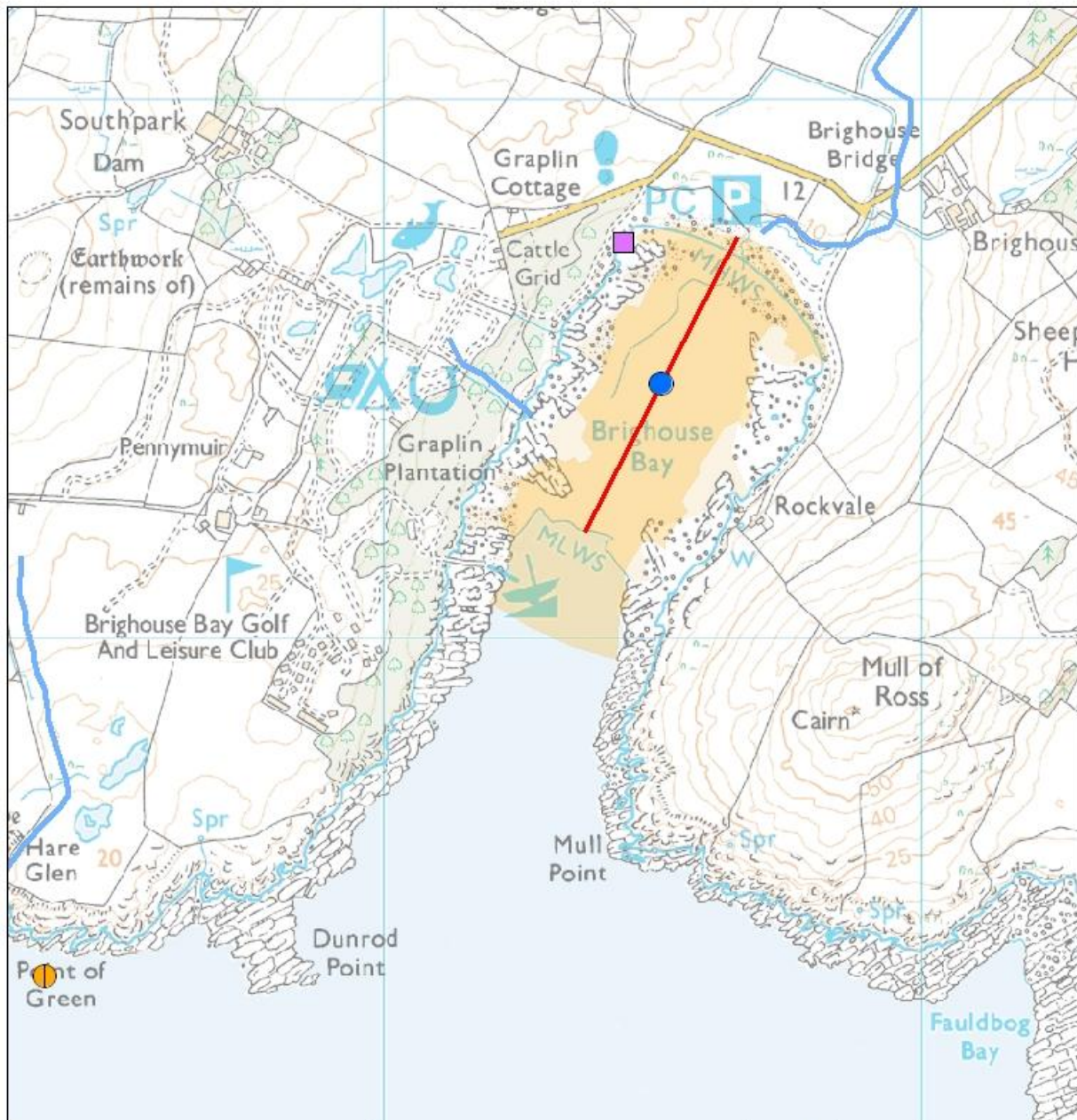
Brighthouse Bay bathing water is part of our daily water quality prediction and signage network.

Throughout the bathing season we display daily water quality predictions on the electronic message sign (Map 1). These water quality predictions are also available on [our website](#)³ or via the Beachline phone number (08452 30 30 98).

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

³ <http://apps.sepa.org.uk/bathingwaters/Predictions.aspx>

Map 1: Brighouse Bay bathing water

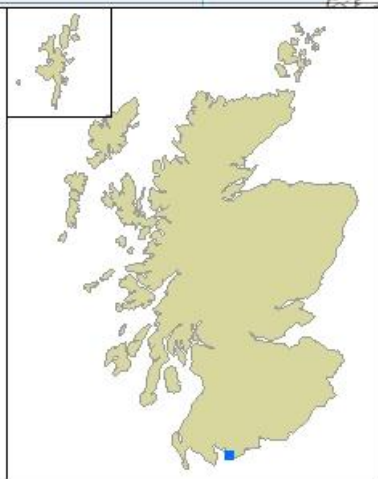


0 100 200 400 m



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- Designated bathing water
- Bathing water sampling point
- Bathing water sampling transect
- SEPA electronic sign
- Sewage effluent discharge
- Watercourses



Map 2: Catchment draining into Brighouse Bay bathing water



Catchment description

The catchment draining into the bathing water extends to 8.4 km². This hilly catchment has several prominent features such as Cairniehill which stands at 80 metres and the Mull of Ross (100 metres above sea level) to the south east of the bay. The coastline has an average elevation of 10 metres.

The area is predominantly rural (97%) with agriculture the major land use. There are several dairy farms within the catchment therefore most support cattle with the surrounding land being used as pasture. Approximately 2% of the bathing water catchment is urban. The main population centres are Borgue and Kirkcudbright which lie 3 km to the northwest and 8 km to the northeast of the bathing water, respectively.

Average summer rainfall for the region is 356 mm compared to 331 mm across Scotland as a whole.

There is only one tributary draining into the bathing water (known locally as Brighthouse Burn) which enters the bay midway along the beach at the footbridge.

The bathing water lies entirely within the Borgue Coast Site of Special Scientific Interest (Map 2). The area is used by Canada geese (for their late summer moult) and several species of wading birds and may have the potential to influence water quality at the bathing water. See Scottish Natural Heritage's [information service website](#)⁴ for further information.

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](#)⁵ (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](#)⁶ (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.

There are several farms in the catchment draining to the bathing water, the majority of which support sheep and cattle. Best management practice measures to reduce the level of diffuse pollution were put in place in 2003 and 2004. These measures produced a reduction in diffuse pollution. A follow up Scottish Government funded study in 2007 showed that this reduction had been maintained.

The Brighthouse Bay catchment is part of the Galloway Coastal priority catchment, which has been identified as a diffuse pollution priority catchment in the first river basin cycle. Proactive one-to-one farm visits were

⁴ www.snh.org.uk/snhi

⁵ <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/dpmag/>

⁶ www.sears.scotland.gov.uk

undertaken in the catchment during May and June 2014. These visits looked to identify diffuse pollution sources and pathways by which potential pollutants could reach the water environment and impact on bathing waters. All actual and potential polluting sources were discussed with the land manager and mitigation measures agreed with them to reduce the likelihood of diffuse pollution arising from their activities and reduce the risk of bacterial pollution on water quality in the future.

Any improvements as a result of this work are likely to be seen in several years when measures identified as necessary are fully in place. Follow up visits will continue in this catchment in 2015 with work due to be completed by 2017.

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'. In this catchment there is no risk to bathing water quality from Scottish Water assets.

There are no other significant sewage or trade effluent discharges within the catchment.

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.

Brighouse Burn is not affected by urban surface water run-off.

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](#)⁷.

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 Dumfries and Galloway Council.

⁷ <http://apps.sepa.org.uk/bathingwaters/Predictions.aspx>

Contact details and sources of more information

SEPA Newton Stewart office

Penkiln Bridge Court
Minnigaff
Newton Stewart
Dumfries and Galloway
DG8 6AA
01671 402 618
www.sepa.org.uk

Dumfries and Galloway Council

Council Offices
English Street
Dumfries
DG1 2DD
0303 333 3000
cis@dumgal.gov.uk
www.dumgal.gov.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.keeptoscotlandbeautiful.org

Scottish Government

Victoria Quay
Edinburgh
EH6 6QQ
0131 244 0396
egcat@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 Solway Tweed river basin management plan
<http://www.sepa.org.uk/environment/water/river-basin-management-planning/>
- the Solway area management plan <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/solway/>

The Marine Conservation Society's Good Beach Guide: www.goodbeachguide.co.uk

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

Version Control

Version number:	Date:	Next review due:
1.3	March 2013	
1.4	March 2014	
1.5	April 2015	