


Bathing water profile:

Collieston

<p>Bathing water: Collieston</p>	
<p>EU bathing water ID number: UKM1102 01670</p>	
<p>Location of bathing water: UK/Scotland/Aberdeenshire (Map1)</p>	
<p>Year of designation: 2014</p>	

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Bathing water description

Collieston bathing water is a small sandy bay surrounded by the former fishing village of Collieston and its harbour. It is situated on the east coast of Aberdeenshire and lies between Cruden Bay to the North and Newburgh to the South (Map 1).

During high and low tides the approximate distance to the water's edge can vary from 0 to 100m. The sandy beach slopes gently towards the water. For local tide information see: <http://easytide.ukho.gov.uk/EasyTide/index.aspx>.

The bay has been designated as an EC Identified bathing water since 2014.

The monitoring point used by SEPA for taking water quality samples is located in the centre of the designated area (Grid Ref NK 04080 28530) as shown on Map 1.

Monitoring water quality

Please visit our [website](#)¹ for details of the current EU water quality classification and recent results for this bathing water.

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

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

Health Organization 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 can be expected to be impacted to some extent during and following rainfall as pollutant loads may be increased due to runoff from agricultural or urban land within the catchment. In addition, at some locations wastewater spillages from storm water overflows which then drain into the bathing water and can adversely affect water quality.

Faecal pollutants may be derived from human sewage, farming activities and livestock (e.g. cattle, sheep), industrial processes, 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; and/or
- 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 principle risks and source of wet weather driven short term pollution at this bathing water arise from agricultural runoff or storm water sewage overflows. These events are expected to last 1-2 days depending on the duration of the rainfall.

Bathing is not advisable during or following (1 to 2 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 not at risk of a proliferation of macroalgae 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

Collieston bathing water is not part of SEPA's 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: Collieston bathing water



Map 2: Catchment draining into Collieston bathing water



Catchment description

The catchment draining into the Collieston bathing water extends to 0.225km², the wider Buchan Coastal Catchment (between Forvie Burn and Water of Cruden) is 35.7km². The majority of the catchment is flat lying land with an average elevation of approximately 40m. Collieston bathing water is in a small sandy bay within a coastline of steep cliffs and rocky outcrops.

Average summer rainfall for the region is 273mm compared to 331mm across Scotland as a whole.

Sandy Loch and the small burn to the north of the village (near St. Ternan's well) drain into the bathing water beach. Surface water run-off from the village, mainly from the combined sewer overflows that drain the area, could potentially affect the bathing water.

The area is rural (95% rural, 5% suburban) with arable and horticulture as the major land use, followed by heather grassland (66% and 15% of the catchment respectively). The main population centre is within the small village of Collieston.

There are several protected areas either within or in the vicinity of the bathing water and its catchment (Map 2), such as the Sands of Forvie and Ythan Estuary which is designated as a SSSI, SPA and SAC due to the internationally important bird populations it supports, its saltmarshes and geology. Some of these protected areas have the potential to influence water quality at the bathing water, specifically:

- Buchan Ness to Collieston Coastline (SNH Reference: 8473) of international importance for its population of breeding birds, which is a Special Protected Area and a Special area of Conservation
- Collieston to Whinnyfold Coast (SNH Reference: 392) which is recognised for its population of breeding birds and its geology, cliffs and plants, it is a Site of Special Scientific Interest.
- Immediately to the south of Collieston is the Forvie National Nature Reserve, a Scottish Natural Heritage Special Protected Area (SNH Reference: 8592).

For more information on these protected areas see Scottish Natural Heritage's information service [website](#)³.

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 its partners are fully committed to continuing to improving bathing water quality.

Improving diffuse pollution from agricultural sources

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

To help coordinate our work to encourage and ensure action SEPA participate in the [Diffuse Pollution Management Advisory Group](#)⁴ (DPMAG), which is a partnership of a range 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 coordinated education and advice to rural land

³ <http://www.snh.gov.uk/publications-data-and-research/snhi-information-service/>

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

⁵ <http://www.sears.scotland.gov.uk/>

managers.

Additional targeted efforts will be made to improve management of diffuse pollution within catchments identified as 'priority' catchments. These are catchment where the scale of the pollution reduction needed will require planned and targeted actions to be identified and discussed with farmers concerned. In these areas assistance will be given in identifying pollution hotspots and one-to-one advice 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 Collieston bathing water catchment is part of the Buchan Coastal priority catchment. Work in this catchment is due to be completed by 2015.

The catchment lies within a nitrate vulnerable zone and as such will already have measures in place to reduce and prevent further nitrate contamination. For further information see the Scottish Government's [website](#)⁶.

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'.

There is a licenced discharge from the Combined Sewer Overflow and from the wastewater treatment plant serving Collieston which utilises the same outfall as the CSO (Map 1) near the bathing water. The outfall discharges on the north side of the harbour wall away from the bathing beach but, depending on tides, there is potential for the discharges to impact on the bathing water quality.

Investigatory work regarding wastewater discharges is planned prior to the 2015 bathing water season to identify and minimise potential risks to bathing water quality.

Improving pollution from diffuse urban sources

Urban diffuse source pollution results when rainwater falling onto urban areas (roads, pavements, yards and roofs) becomes contaminated with pollutants on those areas, washes into surface water drains and is then discharges from those drains to the water environment.

Tackling this sort 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 and artificial ponds or wetlands that provide a final stage of treatment. Local Authorities, Scottish Water and SEPA are working together to coordinate their efforts to tackle pollution from diffuse urban sources, incorporating SUDS into local plans and encouraging partner organisations to retro-fit SUDS where possible.

Responding to pollution incidents

Although rare, pollution incidents affecting bathing water quality may occur. Pollution incidents tend to be unpredictable events, 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 SEPA will investigate the incident and contact relevant others. This 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

⁶ <http://www.scotland.gov.uk/Topics/farmingrural/Agriculture/Environment/NVZintro>

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 Aberdeenshire Council.

Contact details and sources of more information

SEPA Fraserburgh office

Shaw House
Mid Street
Fraserburgh
AB43 9JN
01346 510502
www.sepa.org.uk

Aberdeenshire Council

Woodhill House
Westburn Road
Aberdeen
Aberdeenshire
AB16 5GB
08456 081207
www.aberdeenshire.gov.uk

Pollution Hotline

0800 8070 60
24 hours per day, seven days per week

Keep Scotland Beautiful

01786 471333
beach@ksbscotland.org.uk
www.keepsotlandbeautiful.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 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 North East Area Management Plan may be found at:
<http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/north-east/>

Good Beach Guide: <http://www.goodbeachguide.co.uk/>

Blue Flag and seaside Awards: <http://www.keepsotlandbeautiful.org/coastal>

Version Control		
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1.0	May 2015	

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