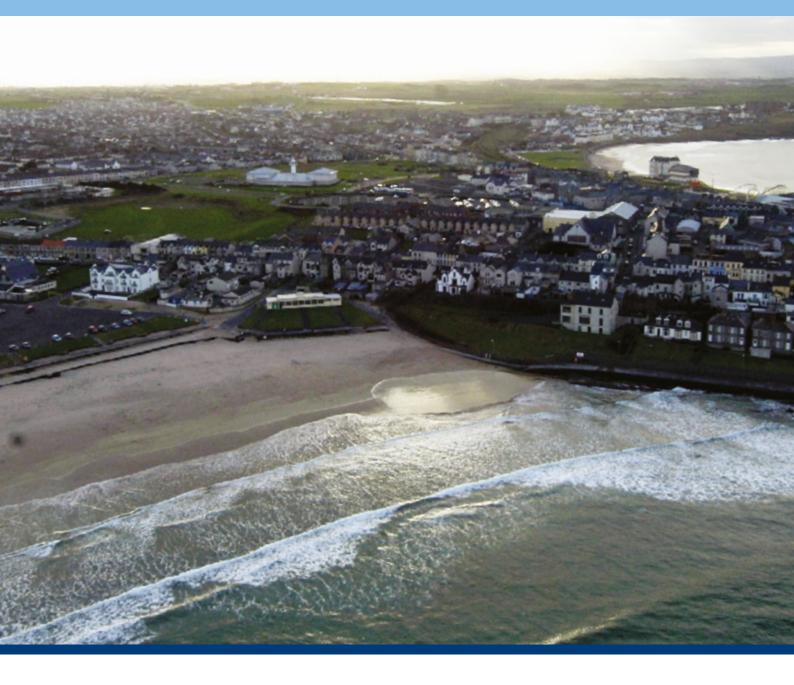
Bathing Water Profile

Portrush (Curran Strand)

May 2023



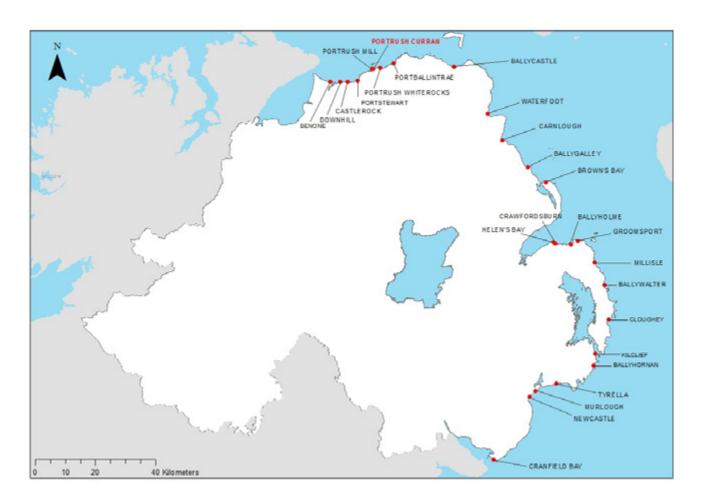


Sustainability at the heart of a living, working, active landscape valued by everyone.





Map of Northern Ireland's Bathing Waters 2023



Background to Bathing Water Profiles

This is one of a series of profiles which cover all 26 of Northern Ireland's identified bathing waters. These are the most popular of our bathing areas and have been 'identified' as part of a network of European bathing sites.

The purpose of the bathing water profile is to help the bather to make an informed choice before bathing. The profile gives information on the physical, geographical and hydrological characteristics of the bathing water while assessing the possible pollution risk at the site. Bathing water profiles are a requirement, under the Quality of Bathing Water Regulations (Northern Ireland) 2008 (www.daerani.gov.uk/articles/bathing-water-quality). It is our intention to review the profiles annually.

All of our bathing waters are monitored during the bathing season. In Northern Ireland the season runs between 1st June and 15th September each year. Bathing waters are tested for bacteria which indicate faecal contamination. Results are published weekly to bathing water operators and to the NI Direct web site (www.nidirect.gov.uk/articles/bathing-water-quality). Waters are then classified annually as Excellent, Good, Sufficient or Poor, as defined by the Quality of Bathing Water Regulations (Northern Ireland) 2008.

Key Information

Bathing Water Name Portrush (Curran Strand)

Bathing Water

Location UK/Northern Ireland/County

Antrim/North Coast

Year of identification 1988

Local council area Causeway Coast and Glens

Borough Council

Bathing Water Causeway Coast and Glens

Operator Borough Council

Description of Sand, approximately 1.5 bathing beach kilometres in length,

contiguous with Whiterocks

Bathing Water

Monitoring Point Western end of bathing

water, C86154059 (Map 2)

A Description of Portrush (Curran Strand) bathing water and the surrounding area

Portrush (Curran Strand) is one of Northern Irelands most popular bathing waters and is located on the north coast of Northern Ireland. The beach is contiguous with Whiterocks bathing water having a combined length of approximately three kilometres.

The bathing beach is comprised entirely of sand backed by a promenade, sand dune system and golf course. The western end of the bathing water is surrounded by a residential area which includes a busy watersports centre. The majority of facilities are found in this area, including public toilets and parking. The beach is generally accessed from the car park and promenade at the western end.

The immediate catchment for this bathing water is urban. However, further inland the catchment consists of improved grassland with neutral grass and arable horticulture. The main geology in the area is a mix of Mesozoic sedimentary and tertiary igneous rocks.

There is one minor river which flows across the bathing beach. This river flows primarily through a rural environment although it does flow through a segment of Portrush town and can therefore be influenced by rural and urban discharges.

Two additional minor rivers flow on to the adjacent Whiterocks bathing water. These may influence the water quality at Portrush (Curran Strand) during periods of heavy rainfall.

The main area of population affecting this bathing water is the town of Portrush, which is located to the west of the bathing area. This town has an approximate population of 6,379 which is increased during the summer season by large numbers of holiday makers.

Bathing Water Quality at Portrush (Curran Strand)

Portrush (Curran Strand) bathing water was identified in 1988. Monitoring and reporting is carried out by DAERA Marine and Fisheries Division.

Newcastle Bathing Water Quality 2018-2022



Bathing Waters are classified as Excellent, Good, Sufficient or Poor (see above). This classification is based on a statistical assessment of results from the last four years.

All of Northern Ireland's water quality objectives are set out in the River Basin Management Plan (www.daera-ni.gov.uk/topics/water/river-basin-management). Within the Programme of Measures in the River Basin Management Plan are a number of measures which relate directly to the protection of Bathing Waters.

Potential sources of pollution and measures to reduce the impact at the bathing water

It should be noted that weekly classification at Portrush (Curran Strand) bathing water is generally Good or Excellent.

The potential sources of pollution have been split into three main categories. These are waste water (sewage) treatment works discharges, waste water systems in urban areas and rural source pollution, including agriculture.

Portrush (Curran Strand) was identified as being at risk from likely water pollution based on summary analysis of bathing water results, monitoring of associated rivers and some investigative monitoring. A project was initiated in 2016 to investigate the catchment and inspect possible sources of microbiological contamination inputting to the bathing water. Microbial Source Tracking (MST) was included as a further investigative tool in 2017.

Results have proved inconclusive so far with a complex mixed picture of agricultural and sewage related pollution in the catchment. Further investigations have been prioritised for the catchment in an attempt to identify and rectify pollution sources.

Waste Water

There is a major waste water treatment facility between Portrush and Portstewart with an outfall approximately 1 km off the coast to the east of Portstewart. This treated waste water outfall is approximately 5 km west from the Portrush (Curran Strand) bathing water. The works treats waste water from the wider Portrush, Portstewart, Castlerock and Coleraine area. The waste water receives secondary treatment.

Portrush town is a very popular seaside location attracting large numbers of visitors during the summer season. This urbanisation is a potential source of pollution, especially during and after periods of prolonged or heavy rainfall. In the event of very heavy rainfall a collection system may not be able to deal with all the flow received. A portion of the contents of the collection system may overflow to a waterway under storm conditions. This is why there is general advice not to bathe during or up to 2 days after such rain.

The municipal collection and treatment of waste water has the potential to cause pollution because all collection systems must be designed to overflow in periods of extreme wet weather or following failure

of the pump system. If systems are not designed in that way, then sewers may overflow into residential areas. Within the Portrush area there are combined sewer overflows (CSO), emergency overflows and wastewater pumping stations with associated emergency overflows as shown on Map 1.

In order to reduce the potential for pollution in the water environment from these systems NIEA requires that all current and proposed systems meet the requirements of the Urban Waste Water Treatment Regulations (Northern Ireland) 2007 (www.daera-ni.gov.uk/articles/urban-waste-water) and the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017.

During the expansion of any urban area, there is the potential for misconnections between the sewer system and surface drains, which may allow untreated wastewater to enter the water environment. When these become apparent, NIEA pursues them as pollution incidents.

A further measure in tackling urban pollution is through the use of sustainable urban drainage systems (SUDS), which NIEA encourages through its SUDS Strategy. Other measures include compliance with the Northern Ireland Water Order 1999 and implementation of Pollution Prevention Guidelines (https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/).

Agriculture and rural activities

Although Portrush (Curran Strand) bathing water is located in a mainly urban area, further inland the catchment consists of improved grassland with some neutral grass and arable horticulture. Agriculture accounts for approximately 70% of the total Northern Ireland land area of 1.4 million hectares, and characterises much of the rural landscape. The agricultural industry is predominately grass based, with grazing livestock accounting for more than two-thirds of the gross industry output. Agriculture and the agri-food sector makes a very important contribution to the economy of Northern Ireland.

The most significant pressures on water quality are from the release of the nutrients phosphorous and nitrogen from agricultural sources. Agriculture can also give rise to sediment entering waters due to the damage caused to river banks and lake shores by livestock trampling and from other types of land disturbance e.g. ploughing and overgrazing. Agricultural activities are also a source of certain microbial vectors causing human illnesses including cryptosporidium and e-coli bacteria which can be an issue in bathing water areas. Other pressures from agriculture include the contamination of waters from

hazardous chemicals, such as pesticides and sheep dip.

The Nitrates Action Programme and the Phosphorous Regulations have been revised and combined into the **Nutrients Action Programme (NAP) 2019-2022.** The Nutrient Action Programme (Amendment) Regulations (Northern Ireland) 2019 came into operation on 15 October 2019. The revised NAP has new measures to promote more efficient nutrient management and best practice.

The **Knowledge Advisory Service (KAS)** was set up in April 2018 as a single advisory service aimed at supporting Northern Ireland's farm and food businesses.

The **Environmental Farming Scheme (EFS)** is DAERA's agri-environment scheme under the Rural Development Programme 2014-2022. EFS has been designed to address specific environmental needs, primarily relating to biodiversity and water.

A **Soil Nutrient Health Scheme (SNHS)** for Northern Ireland was launched in 2022 and will run for 4 years. The Scheme is a soil sampling and carbon analysis scheme that will provide farmers with nutrient levels in their soils across all fields as well as providing an accurate estimate of the carbon stored in the soils, hedgerows and trees on their farms. The scheme will benefit farmers in management of their nutrient applications which will help improve water quality and manage agricultural land more effectively.

Septic tanks also have the potential to cause localised pollution, but there is no evidence to suggest that this is impacting Portrush (Curran Strand) bathing water.

Other potential sources of pollution

Other sources of pollution exist in this bathing area, these include;

- Dogs
- Horses
- Litter
- · Fly tipping

All issues have been addressed through local signage to ensure that these controllable causes of pollution do not affect the bacteria content of the water.

NIEA have compiled the River Basin Management Plan, which takes an integrated approach to the protection, improvement and sustainable use of the water environment. This plan identifies existing pollution reduction programmes and additional measures which could be implemented to maintain or improve the water quality.

Portrush (Curran Strand) is located in the North Eastern River Basin Division. A draft of the 2021-2027 river basin management plan can be found here: www.daera-ni.gov.uk/sites/default/files/consultations/daera/Draft%203rd%20cycle%20 River%20Basin%20Management%20Plan%20for%20 Northern%20Ireland%202021-2027 0.PDF

Pollution events

From 2019-2022 there were twelve confirmed incidents of pollution within the vicinity of the bathing water.

What should I do if I see a pollution incident?

If you see a water pollution incident, you should immediately contact NIEA through the Emergency Water Pollution Hotline, which is operated 24 hours.

Phone: 0800 807060

When a pollution incident is reported or pollution is found to be affecting the water quality of a bathing water, an immediate investigation is instigated.

All possible sources of pollution are checked.

In addition, a resample will be collected to monitor whether the beach is still polluted. Bathing waters may be closed (by local authority or controlling body) until the water quality has improved and levels of bacteria are within mandatory standards.

Macro-Algae, Phytoplankton and Cyanobacteria (blue-green algae)

Portrush (Curran Strand) bathing water is not at risk of a proliferation of macro-algae, phytoplankton or cyanobacteria (blue/green algae).

Daily water quality forecasts

Portrush (Curran Strand) is one of six bathing waters in Northern Ireland with daily bathing water quality prediction modelling. The model has been developed under the SWIM NI programme with predictions available to the public during the bathing season. The project was originally funded by the EU's INTERREG VA programme, managed by the Special EU Programmes Body (SEUPB), and match-funded by the Department of Agriculture, Environment and Rural Affairs in Northern Ireland (DAERA), and the Department of Housing, Planning and Local Government in Ireland. This model is currently in the pilot stage and daily water quality predictions are based on forecasted weather. Results are updated daily at 09:00. The predictions can be found on electronic signage or QR codes displayed at the

bathing water and on the <u>SWIM NI</u> webpage or App. This system provides members of the public with a warning when there may be poor water quality brought about by short-term pollution events, enabling them to make an informed choice about bathing. As weather forecasts are not always accurate DAERA advice remains not to bathe during or up to 2 days after prolonged or heavy rain.

Contact details

For general information about bathing waters:

DAERA Marine and Fisheries Division

17 Antrim Road,

Tonagh

Lisburn, BT28 3AL

Email: Marine.InfoRequests@

daera-ni.gov.uk

Phone: 028 9262 3244

Water Pollution
24hr Hotline

Phone: 0800 807060

Local Authority Causeway Coast and Glens

Borough Council

Cloonavin

66 Portstewart Road

Coleraine BT52 1EY

Phone: 028 7034 7034

Portrush (Curran Strand) bathing water area Bathing water sampling transect Wastewater Pumping Station Combined sewer overflow BALLYCRAIG LOWER 0.8 Kilometres 9.0 ROYAL PORTRUSH WARD 0.4 0 0.1 0.2 DALLYWILLIN 1:14,000 PORT RUSH PORTRUSH On an Occupital and is reproduced with the permission of Land & Dropeny Samues under designed authority from the Controller of Her Majesty's Salsonery Office.

© Crown copyright and desibese right 2018 DMOUZOS **Potential Pollution Sources**

Portrush (Curran Strand) Bathing Water -

Map 1

7

Portush Curran Bathing water area - Bathing water sampling transect D.B. Killometers 70 \Rightarrow 0.2 0.1 1.8,000 @ Crown copyright and database right 2013 DNACU 204

Portrush (Curran Strand) Bathing Water -EC Bathing Water Sample Location

Department of Agriculture, Environment and Rural Affairs Marine and Fisheries Division 17 Antrim Road Tonagh Lisburn BT28 3AL

Water Pollution Hotline: 0800 807060

Email: Marine.InfoRequests@daera-ni.gov.uk



