Bathing Water Profile

Portstewart

May 2021

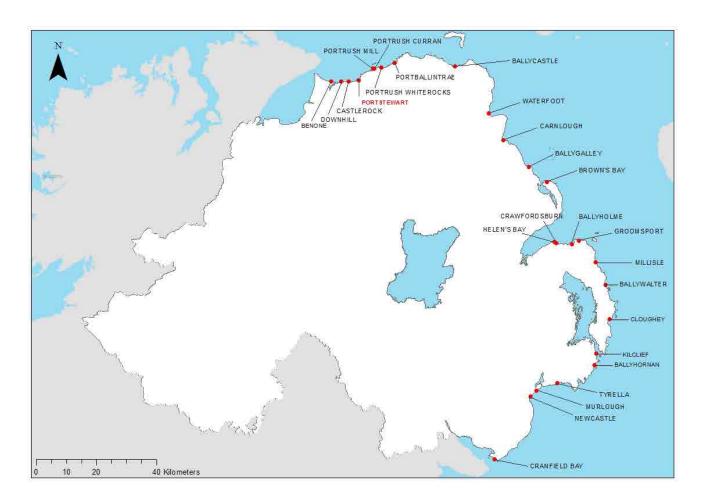








Map of Northern Ireland's Bathing Waters 2021



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 on 20 occasions 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 website (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 Portstewart Bathing Water

EU bathing water ID number

UKNO4_48900

Location UK/Northern Ireland/County

Londonderry/North Coast

Year of identification 1988

Local council area Causeway Coast and Glens

Borough Council

Bathing Water Operator

The National Trust

Description of bathing beach

Sand, approximately 3 kilometres in length

Monitoring Point

At east end near main access point, C 8087 3677, (Map 2)

A Description of Portstewart Strand and the surrounding area

Portstewart bathing water is a popular tourist destination located on the north coast of Northern Ireland. The beach is approximately three kilometres in length and runs from the mouth of the River Bann (Barmouth) on the west side to cliffs on the east side.

The bathing beach is comprised entirely of sand backing onto an extensive sand dune system which runs the length of the beach. The dune system on the western side of the beach stretches back to the River Bann and on the eastern side the sand dunes overlap into a golf course and end at a rocky outcrop with minor cliffs leading to the town of Portstewart. The sand dunes have been designated an Area of Special Scientific Interest and are within the Bann Estuary Special Area of Conservation. The National Trust owns both the upper beach and a section of the approach road which is the principal access point. In addition the Trust, has a management lease from the Crown Estate, to manage the beach between the mean high and low water marks.

The catchment area for this bathing water consists of improved grassland with neutral grass and arable horticulture. The geology of this region is mainly tertiary basalts with underlying cretaceous and Jurassic.

The River Bann flows out to sea at the western end of the beach through the Barmouth (see Map 1). The River Bann flows primarily through rural areas

with agriculture being the main land use, draining some 40% of Northern Ireland. However it also flows through several towns including Coleraine, Portglenone and Toome.

The main area of population affecting the bathing area is the coastal town of Portstewart, which is located to the east. This town has a population of approximately 8,000, although during the summer season this is boosted by large numbers of holiday makers. The town of Coleraine (pop. 24,000) is located to the south of the bathing area. This town may not directly affect the bathing area but as the River Bann runs directly through the town it may therefore indirectly affect the water quality.

Bathing Water Quality History at Portstewart

Portstewart bathing water was identified in 1988. Monitoring and reporting is carried out by DAERA Marine and Fisheries Division.

Portstewart Bathing Water Quality 2016-2020



In 2015 the 1976 Bathing Water Directive was replaced by the European Bathing Water Directive 2006/7/EC. This revised directive was transposed into Northern Ireland regulations through the Quality of Bathing Water Regulations (Northern Ireland) 2008 and introduced more stringent bathing water standards. 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 River Basin Management Plans (www.daerani.gov.uk/topics/water/river-basin-management). Within the Programme of Measures in the River Basin Management Plans there are a number of measures which relate to the protection of Bathing Waters.

Due to the COVID-19 pandemic the Department carried out a reduced sampling programme at all identified bathing waters in Northern Ireland in 2020. Each bathing water was sampled on 5 occasions throughout this bathing season.

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

It should be noted that weekly compliance at Portstewart 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.

DAERA Marine and Fisheries Division work with NIEA and other Departments to identify and resolve sources of pollution.

Are there Waste Water Treatment Works in the vicinity of Portstewart beach?

There is a major waste water treatment facility between Coleraine and Portstewart with an outfall approximately 1 km off the coast, to the east of Portstewart. This treated waste water outfall is approximately 4 km from the Portstewart bathing water. The works treats waste water from the wider Portrush, Portstewart and Coleraine area. The waste water receives secondary treatment.

Are there other risks of pollution from waste water systems?

Portstewart 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 of 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 a pump system. If systems are not designed in that way, then sewers may overflow into residential areas. Within the Portstewart and Coleraine area there are combined sewer overflows, emergency overflows and wastewater pumping stations with emergency overflows.

NIW has in the past made significant improvements to the sewer system in this area.

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.daerani.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 (www.netregs.org.uk/library_of_topics/pollution_prevention_guides.aspx).

Are there risks from agriculture and rural activities?

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 2014-2020. EFS has been designed to address specific environmental needs, primarily relating to biodiversity and water.

The **Sustainable Agricultural Land Management Strategy** for Northern Ireland was published in 2016 and contains further recommendations aimed at reducing phosphorus levels and managing agricultural land more effectively.

The wider catchment area inland of Portstewart has a significant amount of improved grassland containing neutral grass and arable horticulture.

Septic tanks also have the potential to cause localised pollution, but there is no evidence to suggest that this is impacting Portstewart Strand.

Are there 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 River Basin Management Plans, these take an integrated approach to the protection, improvement and sustainable use of the water environment. Each plan identifies existing pollution reduction programmes and additional measures which could be implemented to maintain or improve the water quality.

Portstewart is located in the North Eastern River Basin Management Plan - further details can be found at www.daera-ni.gov.uk/publications/north-easternriver-basin-management-plan-2015-2021

Is there evidence of short term water pollution events at Portstewart?

From 2017-2020 there were thirty-five confirmed water pollution events within 3kms of the bathing water. Fifteen of these events occurred during the bathing seasons.

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)

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

Daily water quality forecasts

There is presently no facility to predict bathing water quality on a daily basis. However, the general advice remains: do not to bathe during or for up to 2 days after heavy rainfall events.

Contact details

For general information about bathing waters:

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

Local Authority Ca

Phone: 0800 807060

Causeway Coast and Glens Borough Council, Cloonavin, 66 Portstewart Road,

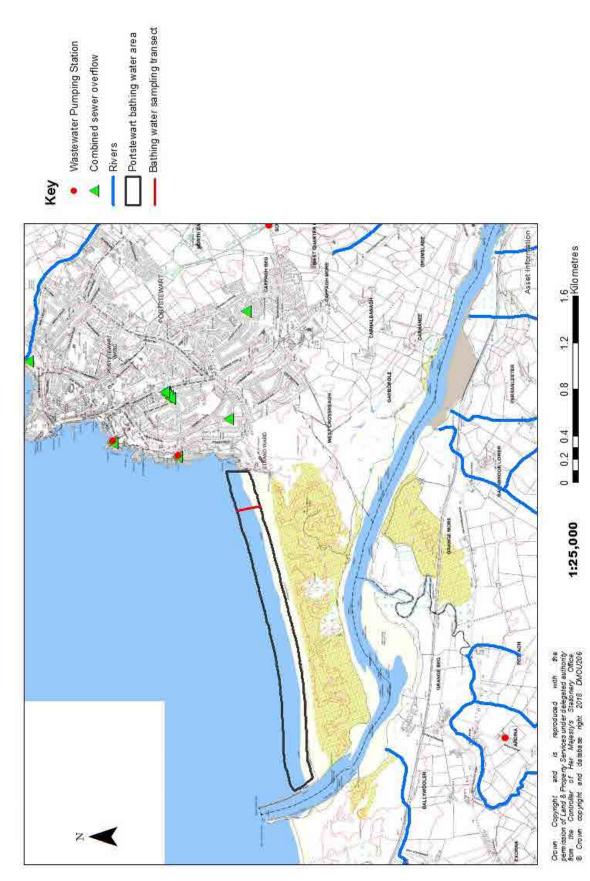
Coleraine, BT52 1EY Phone: 028 7034 7034

Bathing Water Operator

The National Trust, Portstewart Strand Visitor Centre, 118 Strand Road, Portstewart, BT55 7PG.

Phone: 028 7083 6396

Map 1
Portstewart Bathing Water Potential Pollution Sources



Portstewart Bathing water area Bathing water sampling transect 1 Kilometers ΚĒ 0.75 0.5 0.25 1:14,000

Portstewart Bathing Water -EC Bathing Water Sample Location Map 2

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