Bathing Water Profile

Portballintrae (Salmon Rock)

May 2021

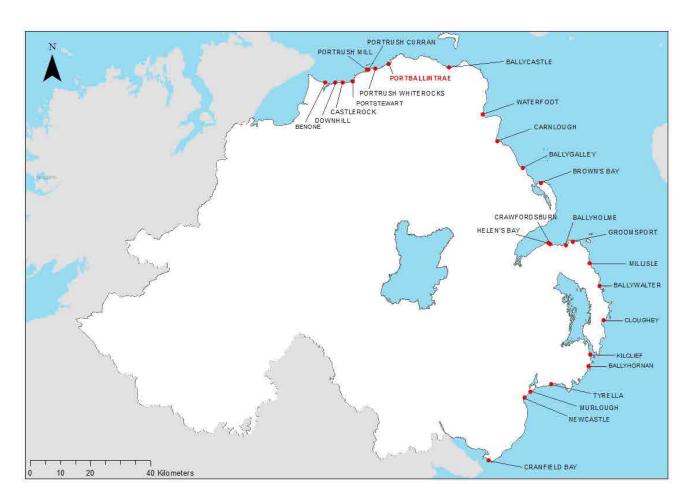








Map of Northern Ireland's Bathing Waters 2021



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 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 Portballintrae (Salmon Rock)

Bathing Water

EU bathing water ID number

UKNO4_50200

Location UK/Northern Ireland/County

Antrim/North Coast

Year of identification 2008

Local council area Causeway Coast and Glens

Borough Council

Bathing Water Causeway Coast and Glens
Operator Borough Council

perator Borough Counci

Description of bathing beach

Sand and shingle, approximately 0.15 kilometres in length

Monitoring Point Middle of bathing water, C92784242 (Map 2)

A Description of Portballintrae (Salmon Rock) bathing water and the surrounding area

Portballintrae (Salmon Rock) bathing water is located on the North Coast of Northern Ireland, adjacent to the village of Portballintrae. The bathing water is less than 200 metres in length and consists mainly of a sandy area with a rocky shoreline at either end and enclosed by offshore rocks (Map 2).

The bathing area is backed by an area of grass and then by a main road which runs parallel to the bathing area. This leads to a car park, picnic area, toilets and village hall at the eastern end of the bathing area. Across the road is residential accommodation, although it is mainly holiday houses and apartments.

The main residential area of Portballintrae is inland and further to the south and west. This is a modest village which is popular for second homes, day visitors and holiday makers. The core population of around 700 can easily be boosted to over 2,000 at weekends. The village has extensive amenity facilities, a golf course, a small harbour and an extensive caravan park.

The beach and bathing water are accessed by steps at each end from the road and footpath above. This is a very enclosed area, popular with families and small children. Although the River Bush does not enter the bathing area it is close to the eastern end of the bathing area, separated by a large rocky outcrop.

The catchment in which the bathing water is located consists of improved grassland with neutral grass, arable horticulture and a small amount of open and dense dwarf heath. The main geology in the area is a mix of Mesozoic sedimentary and tertiary igneous rocks.

Bathing Water Quality History at Portballintrae (Salmon Rock)

Portballintrae (Salmon Rock) bathing water was identified in 2008. Monitoring and reporting is carried out by DAERA Marine and Fisheries Division.

Portballintrae (Salmon Rock) Bathing Water Quality 2016-2020

Bathing Water

2016 2017 2018 2019 2020

Portballintrae (Salmon Rock)

Key: Excellent Good Sufficient Poo

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 directly 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 classification at Portballintrae (Salmon Rock) 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 Portballintrae (Salmon Rock) beach?

During 2011 a major upgrade was carried out and the wastewater from Portballintrae is now pumped to the new Waste Water Treatment Works in Bushmills. This works provides secondary treatment in order to protect the receiving water, the Bush River. The discharge is approximately 1.5km from the bathing water.

Are there other risks of pollution from waste water systems?

Portballintrae village is a 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 Portballintrae area there are 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 (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 of Portballlintrae bathing water has a significant amount of improved grassland with neutral grass, arable horticulture and a small amount of open and dense dwarf heath.

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

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.

Portballintrae 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 Portballintrae (Salmon Rock)?

From 2017-2020 there were sixteen confirmed incidents of water pollution within 3kms of the bathing water. Five of these incidents occurred

during the bathing seasons and two of which were reported by DAERA Marine and Fisheries Division.

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)

Portballintrae (Salmon Rock) 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 bathe during or for up to 2 days after heavy rainfall events.

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

Phone: 0800 807060

Water Pollution 24hr Hotline

nr Hotline

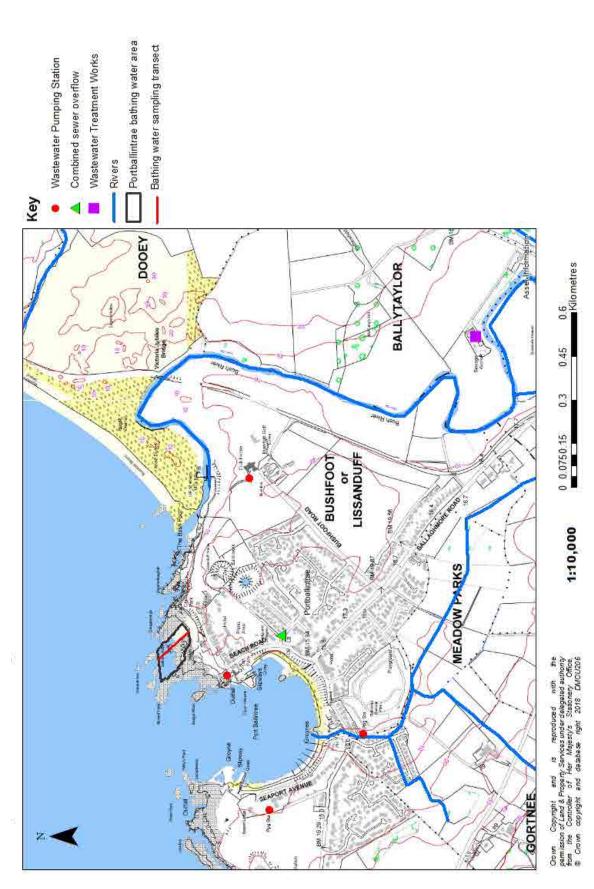
Local Authority Causeway Coast and Glens

Borough Council

66 Portstewart Road Coleraine, BT52 1EY

Phone: 028 7034 7034

Portballintrae (Salmon Rock) Bathing Water -Potential Pollution Sources



Portballintrae Bathing water area - Bathing water sampling transect 0.16 Kilometers ΚĒ 0.12 0.08 0.04 0.04 0.02 0

Portballintrae (Salmon Rock) Bathing Water -**EC Bathing Water Sample Location** Map 2

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Water Pollution Hotline: 0800 807060

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