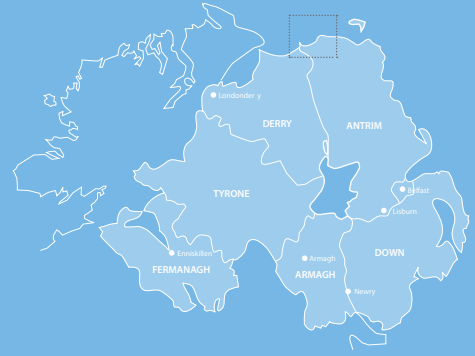


Northern Ireland  
Environment Agency

Bathing Water Profile

# Portballintrae (Salmon Rock)

May 2012



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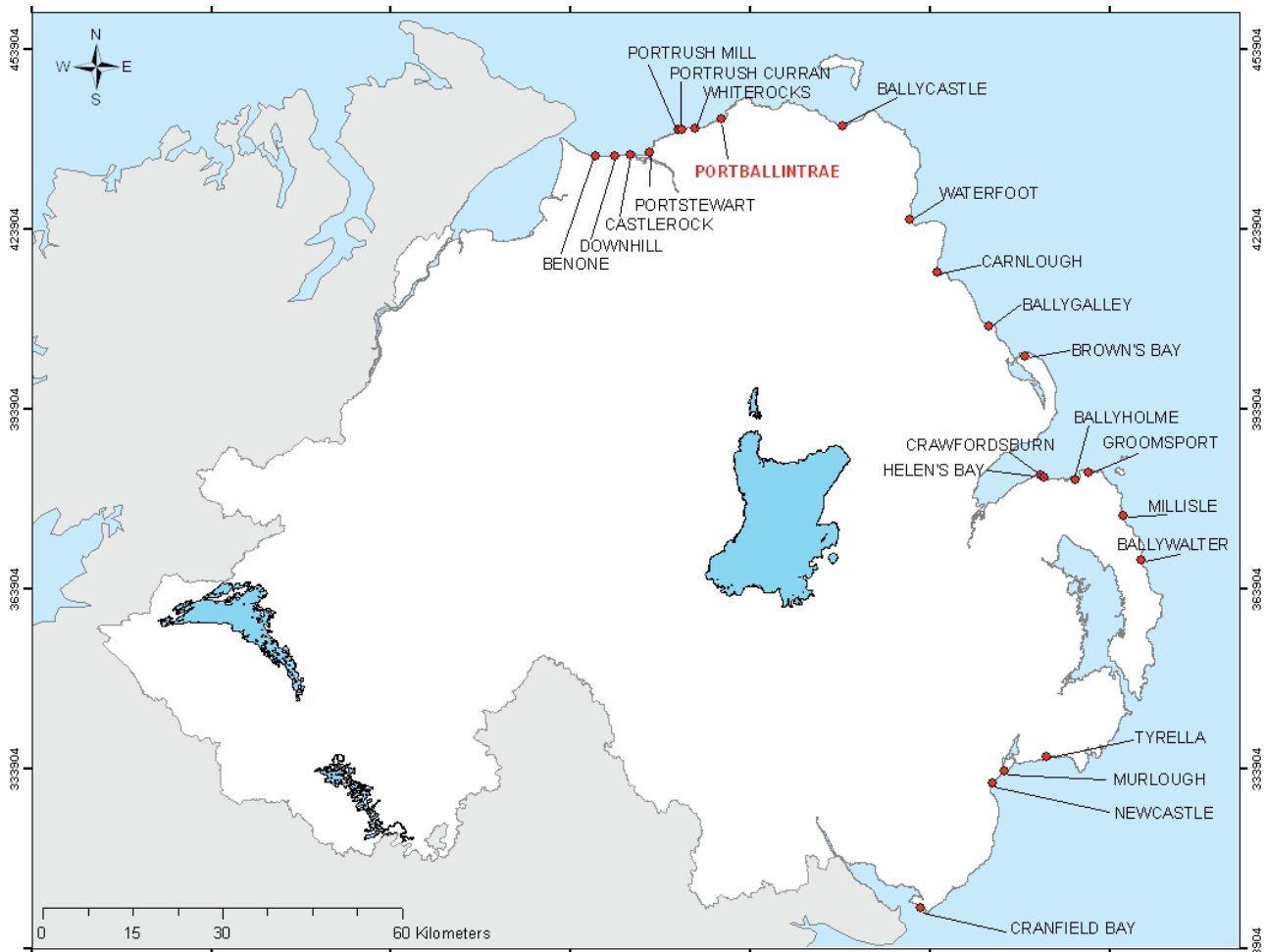


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## Map of Northern Ireland's Bathing Waters 2012



## Background to Bathing Water Profiles

This is one of a series of profiles which cover all 23 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 new European requirement, under the 2006 revised Bathing Waters Directive ([www.doeni.gov.uk/niea/new-bathing-water-directive](http://www.doeni.gov.uk/niea/new-bathing-water-directive)). 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 NIEA web site. Waters are then classified annually as Excellent, Good or Poor, as defined by the European Bathing Water Directive, 1976.

In effect, this profile reflects a transition from the 1976 Directive to the 2006 Directive which must be fully implemented by 2015.

## Key Information

<b>Bathing Water Name</b>	Portballintrae (Salmon Rock) Bathing Water
<b>EU bathing water ID number</b>	UKNO4_50200
<b>Location</b>	UK/Northern Ireland/County Antrim/North Coast (Map 1)
<b>Year of identification</b>	2008
<b>Local council area</b>	Coleraine Borough Council
<b>Bathing Water Operator</b>	Coleraine Borough Council
<b>Description of bathing beach</b>	Sand and shingle, approximately 0.15 kilometres in length
<b>Monitoring Point</b>	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.

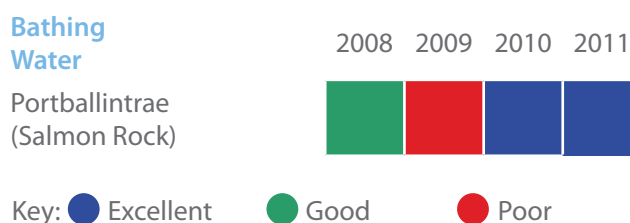
The beach and bathing water are accessed by steps at each end from the road and footpath above. This is a very enclosed area, popular with families and small children. Although the River Bush does not enter the bathing area it is close to the eastern end of the bathing area, separated by a large rocky 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 Northern Ireland Environment Agency (NIEA). Its history of compliance is displayed below and can also be viewed at [www.doeni.gov.uk/niea/bathingqualityni](http://www.doeni.gov.uk/niea/bathingqualityni)

### Portballintrae (Salmon Rock) Bathing Water Quality 2008-2011



The 1976 Directive classified bathing waters as Excellent, Good or Poor. In 2006 a new revised Bathing Water Directive replaced the 1976 Directive. Under a new system of bacterial monitoring bathing waters will, from 2015, be judged against more stringent standards and classified as Excellent, Good, Sufficient and Poor. Using the data collated over the past years, predictions have been made of the new water quality classification and can be seen at [www.doeni.gov.uk/niea/new-bathing-water-directive](http://www.doeni.gov.uk/niea/new-bathing-water-directive). This new system of classification will become 'live' in 2015. NIEA will continue to display both classifications up until that time, although the old classification results will be based on equivalence calculations from the new measurement methodologies, agreed at a UK level.

All of Northern Ireland's water quality objectives are set out in River Basin Management Plans ([www.doeni.gov.uk/niea/wfd](http://www.doeni.gov.uk/niea/wfd)) and detailed management activities are published within Local Management Area Plans (which can be viewed through the same link). These encompass agreed overall objectives for water quality including the quality of identified bathing waters.

## 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.

### Are there Waste Water Treatment Works in the vicinity of Portballintrae (Salmon Rock) beach?

Waste water from Portballintrae is discharged to sea approximately 0.5 km to the west of the bathing water. There are also 3 sewage pumping stations located around the bathing water. During 2011 a major upgrade was completed and the waste water is pumped to the new Waste Water Treatment Works in Bushmills. Computational modelling has been employed to identify a discharge standard that will protect both the River Bush (a noted salmon river) and the Portballintrae (Salmon Rock) bathing water.

Inadequacies in the sewerage system are believed to be responsible for the failure of the Portballintrae (Salmon Rock) bathing water to comply with the standards of the Bathing Waters Directive in 2009. The recent upgrades have specifically addressed this situation.

### 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

sewage 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 Wastewater Treatment Directive ([www.doeni.gov.uk/niea/uwwt\\_gid2\\_2002.doc](http://www.doeni.gov.uk/niea/uwwt_gid2_2002.doc)) and the Water Framework Directive (WFD) ([www.doeni.gov.uk/niea/wfd](http://www.doeni.gov.uk/niea/wfd)).

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.doeni.gov.uk/niea/potential-polluters.htm#vehiclewashoperators](http://www.doeni.gov.uk/niea/potential-polluters.htm#vehiclewashoperators)).

### Are there risks from agriculture and rural activities?

Agriculture is a major industry in Northern Ireland and the wider catchment area of Portballintrae bathing water has a significant amount of improved grassland with neutral grass, arable horticulture and a small amount of open and dense dwarf heath. Areas within the catchment where agriculture is the dominant land use may be subjected to inputs from chemical fertilisers and organic wastes which can contribute to pollution problems in the surrounding area. Prolonged periods of rainfall can cause surface runoff of these organic wastes, such as animal slurries, contributing to the bacteria content in the water environment.

The Nitrates Action Programme Regulations (Northern Ireland) 2010 (previously the Nitrates Action Programme Regulations (Northern Ireland) 2006) and the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006 were introduced to improve the use of nutrients on farms and as a result improve water quality throughout Northern Ireland. The effectiveness of these regulations is continually reviewed through monitoring, enforcement and education.

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 within the Bush local management plan - further details can be found at [www.doeni.gov.uk/niea/bush\\_lma\\_actionplan.pdf](http://www.doeni.gov.uk/niea/bush_lma_actionplan.pdf)

## Is there evidence of short term water pollution events at Portballintrae (Salmon Rock)?

From 2008-2011 there were eight reported incidents of water pollution within 3km of the bathing water. Three of these incidents were reported deteriorations in water quality, although specific causes were never identified. This infers that the bathing water failures were due to high background concentrations of bacteria. This should be fully addressed by the improvements to the sewerage system in Portballintrae and the enhanced waste water treatment at Bushmills.

## 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

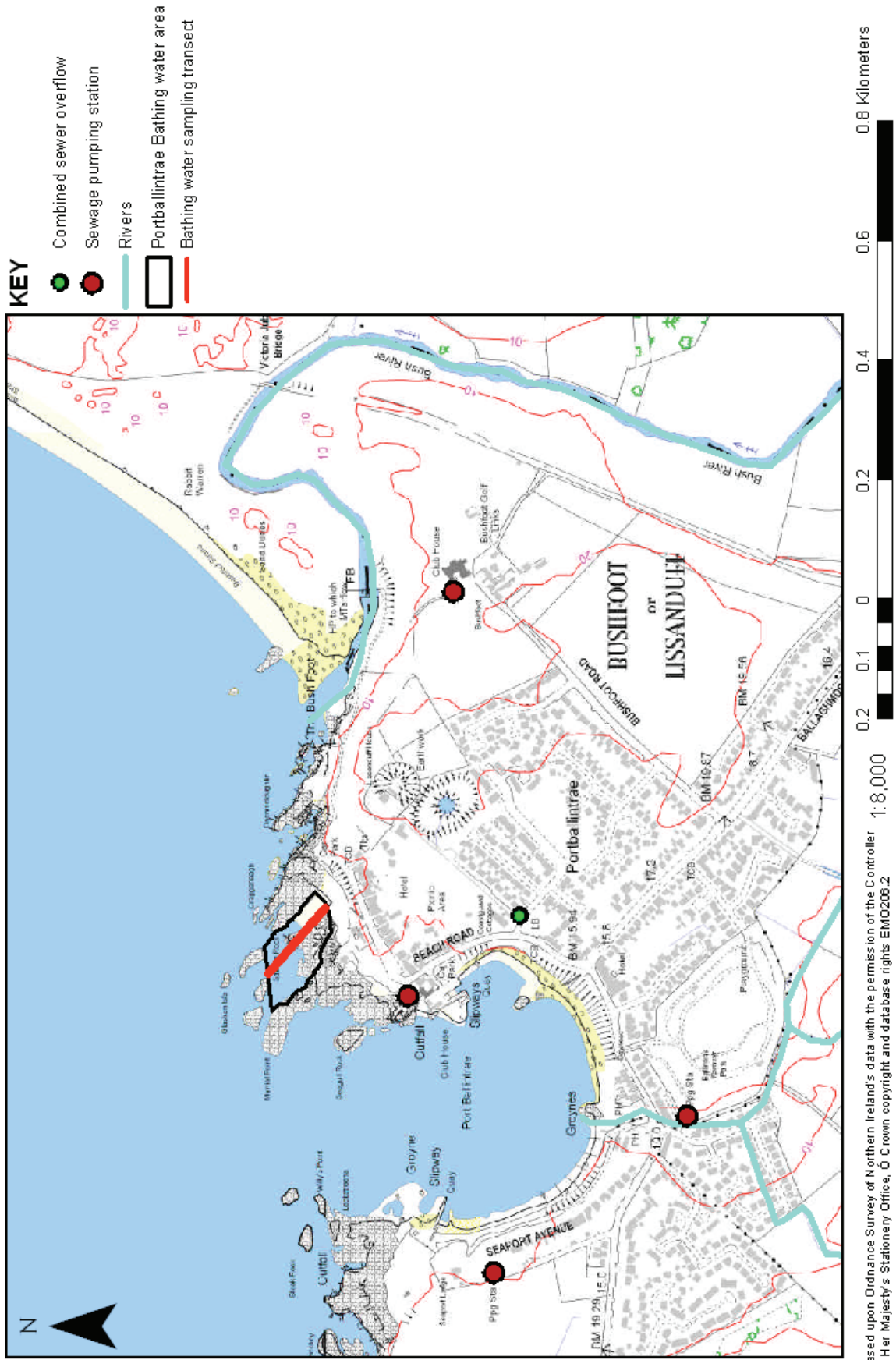
There is presently no facility to predict bathing water quality on a daily basis. However, the general advice remains: do not bathe during or for up to 2 days after heavy rainfall events.

## Contact details

For general information about bathing waters:

<b>NIEA</b>	Water Management Unit General Enquiries 17 Antrim Road Tonagh Lisburn, BT28 3AL  Email: <a href="mailto:WaterInfo@doeni.gov.uk">WaterInfo@doeni.gov.uk</a>
<b>NIEA Water Quality</b>	Phone: 028 9262 3100
<b>NIEA Water Pollution Enquiries</b>	Phone: 0800 807060
<b>Local Authority</b>	Coleraine Borough Council Cloonavin 66 Portstewart Road Coleraine, BT52 1EY  Phone: 028 7034 7034

Map 1  
Portballintrae (Salmon Rocks) Bathing Water -  
Potential Pollution Sources



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





Our aim is to protect, conserve and promote the natural environment and built heritage for the benefit of present and future generations.

Northern Ireland Environment Agency  
Water Management Unit  
17 Antrim Road  
Tonagh  
Lisburn  
BT28 3AL

Water Pollution Hotline: 0800 807060  
Email: [WaterInfo@doeni.gov.uk](mailto:WaterInfo@doeni.gov.uk)