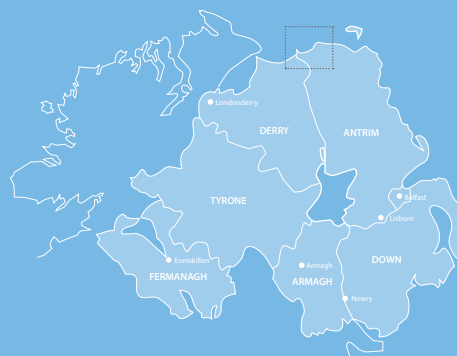


Department of the Environment
Marine Division

Bathing Water Profile

Whiterocks

May 2015



Map of Northern Ireland's Bathing Waters 2015



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/marine-home). 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 Department of the Environment (DOE) 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

Bathing Water Name	Whiterocks Bathing Water
EU bathing water ID number	UKNO4_49800
Location	UK/Northern Ireland/County Antrim/North Coast
Year of identification	2006
Local council area	Causeway Coast and Glens Borough Council
Bathing Water Operator	Causeway Coast and Glens Borough Council
Description of bathing beach	Sand, approximately 1.5 kilometre in length, contiguous with Portrush (Curran Strand) Bathing Water
Monitoring Point	Western side of access point, C88324085 (Map 2)

A Description of Whiterocks bathing water and the surrounding area

Whiterocks bathing water is a popular tourist destination located on the north coast of Northern Ireland. The beach is contiguous with Portrush Curran bathing water and they have a combined length of approximately three kilometres.

The bathing beach is comprised entirely of sand backing onto an extensive sand dune system at the western end, while rocks, cliffs and caves are to be found at the eastern end. There are golf courses over most of the sand dunes and the beach plays host to a number of activities including bathing, surfing, walking and horse riding.

The catchment for this bathing water is mostly rural with pockets of urbanisation. The town of Portrush is approximately 1.5 km to the West. Highly managed golf courses occupy the dunes over most of the bathing water's length. There are a number of residences and a hotel to the eastern end. All of these could influence the water quality. Further inland the catchment consists of improved grassland with arable horticulture, neutral grass 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.

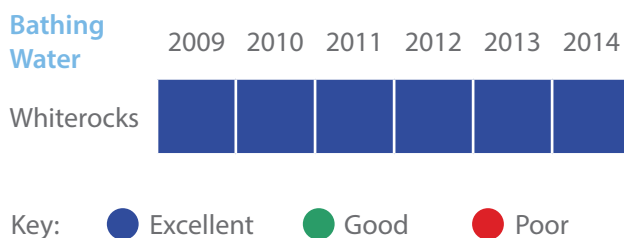
Two minor unnamed rivers flow across the bathing beach, although the more westerly one is now effectively a drain under the golf course and seldom discharges. These rivers flow through a predominantly rural environment with a small number of residences. These may be influenced by both agriculture and urban sources of pollution.

The main area of population affecting this beach is the town of Portrush, which is located to the west of the bathing area. Portrush has an approximate population of 6,379, although during the summer season it attracts large numbers of holiday makers.

Bathing Water Quality History at Whiterocks

Whiterocks bathing water was identified in 2006. Monitoring and reporting is carried out by DOE Marine Division. Its history of compliance is displayed below and can also be viewed at www.doeni.gov.uk/marine-home

Whiterocks Bathing Water Quality 2009-2014



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. This new system of classification will become 'live' in 2015. DOE Marine Division 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) 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 Whiterocks bathing water is generally 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.

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

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

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 6 km West of the Whiterocks bathing water. The works treats waste water from the wider Portrush, Portstewart, Castlerock and Coleraine area. The waste water receives secondary treatment.

Are there other risks of pollution from waste water systems?

Although Whiterocks is in a rural setting the very popular seaside location of Portrush is less than 2 kilometres away. The urbanisation of Portrush 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 combined collection systems must be designed to overflow in periods of extreme wet weather or following failure of the system. If systems are not designed in that way, then sewers may overflow into residential areas. Within the Portrush and Whiterocks area there are combined sewer overflows (CSO), emergency overflows and 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) and the Water Framework Directive (WFD) (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).

Are there risks from agriculture and rural activities?

Agriculture is a major industry in Northern Ireland and the catchment area of the Whiterocks bathing water has a significant amount of improved grassland with some neutral grass and arable horticulture. 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 Phosphorous (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 Whiterocks 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.

Whiterocks 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

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

From 2011-2014 there were seven confirmed pollution events within the vicinity of the bathing water. Six events occurred during the bathing season but did not result in a deterioration in bathing water quality.

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)

Whiterocks 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:

DOE	Marine Division 17 Antrim Road Lisburn, BT28 3AL Email: MarineDivision. InfoRequests@doeni.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

Map 1
Whiterocks Bathing Water -
Potential Pollution Sources



Map 2
Whiterocks Bathing Water -
EC Bathing Water Sample Location





DOE Marine Division
17 Antrim Road
Tonagh
Lisburn
BT28 3AL

Water Pollution Hotline: 0800 807060
Email: MarineDivision.InfoRequests@doeni.gov.uk