

Department of the Environment  
Marine Division

## Bathing Water Profile

# Millisle

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](http://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

<b>Bathing Water Name</b>	Millisle Bathing Water
<b>EU bathing water ID number</b>	UKNO3_53300
<b>Location</b>	UK/Northern Ireland/County Down/North Down Coast
<b>Year of identification</b>	1993
<b>Local council area</b>	Ards and North Down Borough Council
<b>Bathing Water Operator</b>	Ards and North Down Borough Council
<b>Description of bathing beach</b>	Sand, approximately 1.8 kilometres in length.
<b>Monitoring Point</b>	Millisle Lagoon, J 59817618 (Map 2)

## A Description of Millisle bathing water and the surrounding area

Millisle bathing water is located on the Irish Sea coast of the Ards Peninsula in North Down. The bathing water is approximately 1.8 km in length. The southern half of the bathing water is comprised mainly of sand while the northern half consists of a rocky shoreline either side of a man-made lagoon (Map 1). The area is popular with both day visitors and holiday makers.

The village of Millisle is located at the northern end of the bathing area. The population is around 1,000 in the winter rising to over 2,000 in the summer. A main road runs through the town parallel to the coast. There are extensive caravan parks to the north and to the south of the town.

Between the road and the beach are a range of amenity facilities. To the south there is car parking, public toilets and an open play area. To the north is the extensive, man made Millisle Lagoon. Further inland is the village of Millisle. Millisle Lagoon is a purpose built area consisting of approximately 150m of sand and an enclosed seawater lagoon with adjoining children's paddling pool. Both of these are refreshed with seawater every high tide. In addition, the lagoon area also contains a picnic area, a play area, a jetty, slipways and a pier and car park. The Lagoon is where most bathing takes place and this is where water quality is monitored.

Two rivers enter the bathing water, the Mill Burn at the northern end and the Ballyrolly Burn at the southern end.

Inland from the urbanised coastal strip, the land usage is predominately improved grassland, along with arable farming.

## Bathing Water Quality History at Millisle

Millisle bathing water was identified in 1993. 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](http://www.doeni.gov.uk/marine-home)

### Millisle Bathing Water Quality 2009-2014



Key: ● Excellent ● Good ● Poor

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](http://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](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 Millisle 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.

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 Millisle beach?

Millisle sewerage system is part of an extensive network serving the greater Bangor (North Down and Ards) area. A major waste water treatment works for the area was completed during 2009. It provides secondary treatment with UV disinfection during the bathing season. The treated effluent is discharged some 600m offshore, to the north east of Brigg's Rocks. This is approximately 9 km north of the Millisle bathing water. The discharge location of the outfall was selected following extensive computational modelling designed to ensure protection of all of the bathing waters in the area.

## Are there other risks of pollution from waste water systems?

The urbanisation associated with the village of Millisle, 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 Millisle bathing area there are several sewage pumping stations (SPS) 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 land cover within the catchment area of Millisle bathing water is predominately grassland with arable farming. 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 Millisle 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.

Millisle is located in the North Eastern River Basin Management Plan within the Strangford Lough local management plan - further details can be found at [www.doeni.gov.uk/niea/strangford\\_lma\\_actionplan.pdf](http://www.doeni.gov.uk/niea/strangford_lma_actionplan.pdf)

## Is there evidence of short term water pollution events at Millisle?

From 2011-2014 there were fourteen confirmed incidents of pollution within 3kms of the bathing water. Five of these incidents occurred during the bathing season, one of which resulted in a deterioration of 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)

Millisle 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

### DOE

Marine Division  
17 Antrim Road  
Tonagh  
Lisburn, BT28 3AL

Email: [MarineDivision.InfoRequests@doeni.gov.uk](mailto:MarineDivision.InfoRequests@doeni.gov.uk)  
Phone: 028 9262 3244

### Water Pollution 24hr Hotline

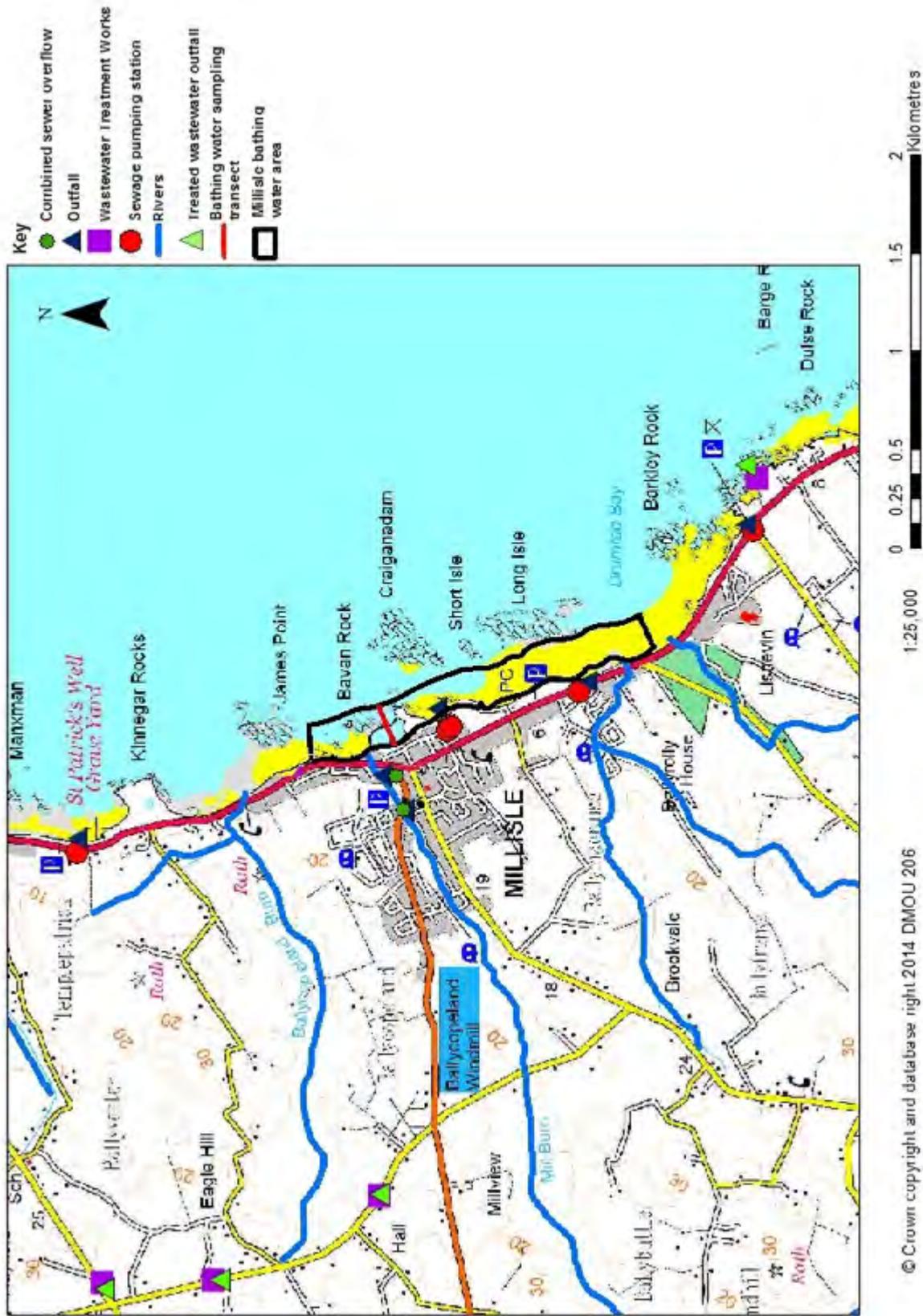
Phone: 0800 807060

### Local Authority

Ards and North Down  
Borough Council  
Town Hall  
The Castle  
Bangor BT20 4BT

Phone: 0300 013 3333

Map 1  
 Millisle Bathing Water -  
 Potential Pollution Sources



Map 2  
Millisle Bathing Water -  
EC Bathing Water Sample Location





DOE Marine Division  
17 Antrim Road  
Tonagh  
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BT28 3AL

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