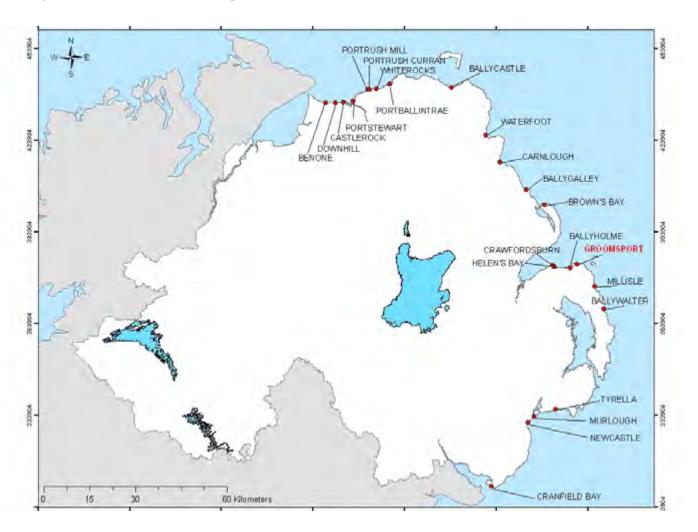
Department of the Environment Marine Division

Bathing Water Profile Groomsport

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	Groomsport Bathing Water
EU bathing water ID number	UKNO2_52800
Location	UK/Northern Ireland/County Down/North Down Coast
Year of identification	1993
Local council area	Ards and North Down Borough Council
Bathing Water Operator	Ards and North Down Borough Council
Description of bathing beach	Sand, rocky outcrops, approximately 0.5 kilometres in length
Monitoring Point	Western end of bathing water, J54128342 (Map 2)

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

Groomsport bathing water is located on the North Down coast. The beach is approximately 0.5 km in length and comprised of sand interspersed with rocky outcrops, a smaller sandy cove and a further rocky outcrop (Map 1). The bathing water is backed by the residential part of Groomsport village. There is a harbour to the west of the bathing water with facilities such as a boathouse, children's play park, paddling pool, car park and public toilets. This harbour area is popular as a centre for both shore based recreation and water based activities such as sailing and power boating.

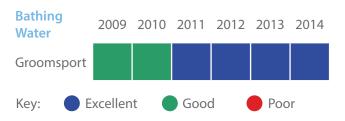
The wider catchment for this bathing area consists of improved grassland, arable farming and dense dwarf shrub heath.

The bathing water is situated in the village of Groomsport. The village has a population of approximately 3,000. Bangor is less than 4km to the west and has a population of approximately 60,000.

## Bathing Water Quality History at Groomsport

Groomsport 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

#### Groomsport 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 Groomsport 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.

Groomsport bathing water was identified as being at risk from likely water pollution based on summary analysis of bathing water results, monitoring of associated rivers and some investigative monitoring. This resulted in a project being initiated by DOE/NIEA to investigate the catchment and inspect possible sources of microbiological contamination inputting to the bathing water. A number of sources of possible contamination were identified and resolved. DOE Marine Division continue to work with both NIEA and other Departments to identify and resolve further sources of contamination.

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

Groomsport sewerage system is part of an extensive network serving the greater Bangor 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 1.4 km north east of the Groomsport 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 both Groomsport and Bangor, 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 area there are combined sewer overflows (CSO), emergency overflows and 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) 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 land cover within the catchment area of Groomsport bathing water is improved grassland, arable farming and dense dwarf shrub 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 Groomsport 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.

Groomsport is located in the North Eastern River Basin Management Plan within the Belfast Lough local management plan - further details can be found at www.doeni.gov.uk/niea/belfast-lough\_lma\_ actionplan.pdf

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

From 2011-2014 there were twenty-four confirmed incidents of pollution within 3kms of the bathing water. Twelve incidents occurred during the bathing season, two 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)

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

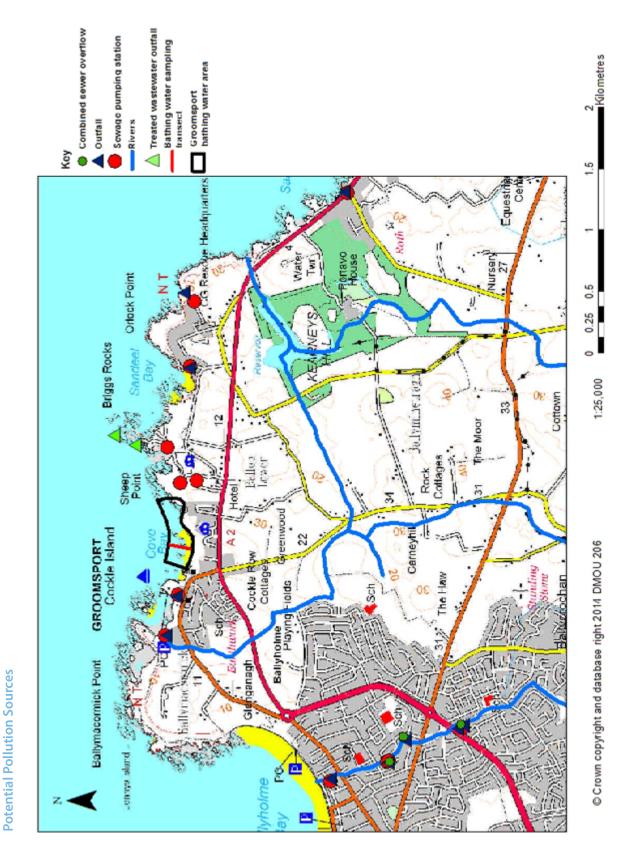
### **Daily water quality forecasts**

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.

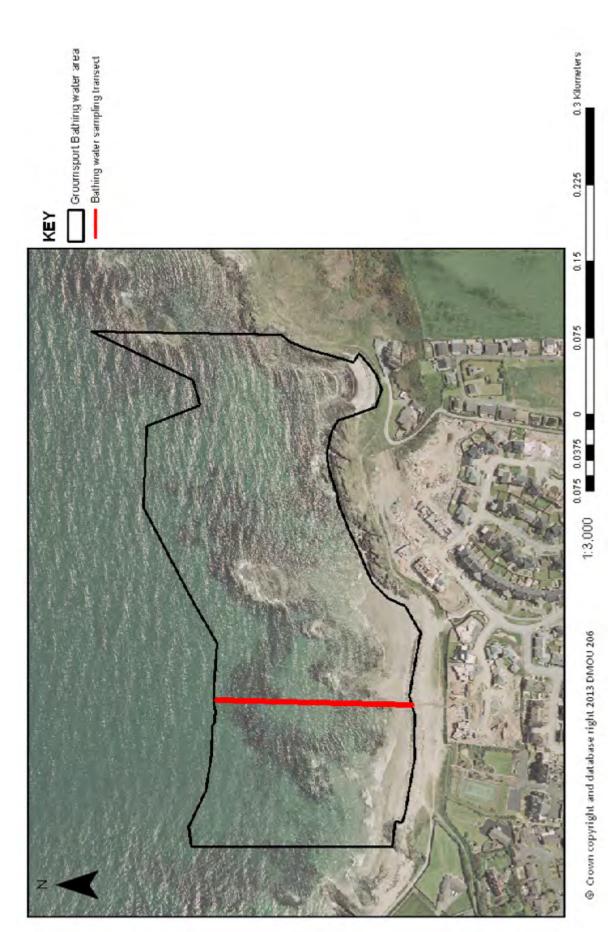
### **Contact details**

For general information about bathing waters:

DOE	Marine Division 17 Antrim Road Tonagh Lisburn, BT28 3AL
	Email: 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



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