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 European requirement, under the 2006 Bathing Water Directive (www.daera-ni.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 website (www.nidirect.gov.uk/articles/bathing-water-quality). Waters are then classified annually as Excellent, Good, Sufficient or Poor, as defined by the European Bathing Water Directive, 2006.
A Description of Ballywalter bathing water and the surrounding area

Ballywalter bathing water is located on the Irish Sea coast of the Ards Peninsula in North Down. The bathing water is approximately 0.85 km in length and is comprised mainly of sand with a rocky shoreline at the northern end. The bathing water is backed by a seawall and promenade area. Leisure facilities include a car park, public toilets, children's play area, tennis courts and bowling club. The village of Ballywalter has an approximate population of 1,500 and is situated at the northern end of the bathing water. Further inland, at the southern part of the bathing area is Ballywalter Park, a stately home on the outskirts of Ballywalter. There are caravan parks both to the north and south of the village which are popular with holiday makers during the summer months. The northern end of the beach is partially protected by Ballywalter harbour; a jetty which extends some 200m out to sea.

The catchment for this bathing area consists predominantly of grassland with arable farming.

There are two rivers which flow across the bathing beach near the southern end. Both these rivers flow through a rural environment and may be influenced by rural discharges.

Bathing Water Quality History at Ballywalter

Ballywalter bathing water was identified in 2006. Monitoring and reporting is carried out by DAERA Marine and Fisheries Division.

In 2015 the 1976 Bathing Water Directive was replaced by the European Bathing Water Directive 2006/7/EC. This revised directive 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.daera-ni.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.
Potential sources of pollution and measures to reduce the impact at the bathing water

It should be noted that weekly classification at Ballywalter 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.

Ballywalter 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. The Department intends to carry out further investigative work in 2018.

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

There is one waste water treatment works inland from the village. Effluent from the secondary treatment process is discharged to sea north of the harbour, some 700m from the bathing water.

Are there other risks of pollution from waste water systems?

The urbanisation associated with the village of Ballywalter, 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 Ballywalter bathing area there are several 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 Wastewater Treatment Directive (www.daera-ni.gov.uk/publication/waste-water-treatment-works-discharges-and-ec-urban-waste-water-treatment-directive) and the Water Framework Directive (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.netregs.org.uk/library_of_topics/pollution_prevention_guides.aspx).

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 Ballywalter 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) 2014 (previously the Nitrates Action Programme Regulations (Northern Ireland) 2010) and the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2014 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 Ballywalter 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.


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

From 2014-2017 there were nine confirmed incidents of water pollution within 3kms of the bathing water. Eight of these incidents occurred during the bathing seasons.

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)

Ballywalter 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.InfoRequest@daera-ni.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 2
Ballywalter Bathing Water - EC Bathing Water Sample Location

Key

- Ballywalter bathing water area
- Bathing water sampling transect

Legend

- 1:6,000

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