Department of the Environment Marine Division

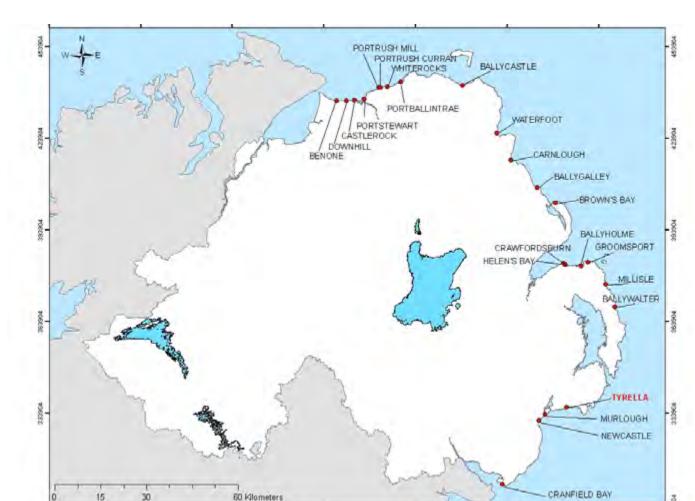
### Bathing Water Profile

### Tyrella

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** Tyrella Bathing Water

**EU** bathing water **ID** number

UKNO3\_53900

Location UK/Northern Ireland/County

Down/South Down Coast

Year of identification 1993

Local council area Newry, Mourne and Down

**District Council** 

Newry, Mourne and Down **Bathing Water Operator** 

District Council

**Description of** bathing beach

Sand, approximately 2 km in

length

**Monitoring Point** Middle of bathing water,

J47123604 (Map 2)

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

Tyrella is situated towards the north eastern end of Dundrum Bay and is very popular with day visitors. The beach is approximately 2km in length and is composed mainly of sand, with a rocky shoreline at each end. It is backed by a mature dune system. There are two groynes across bathing area.

The bathing area is approximately 8 kilometres from the seaside town of Newcastle. Although rural in nature, there are a number of residential properties in the area ranging from farms and private houses to holiday homes. In addition there are public toilet and car parking facilities at a small amenity centre.

The majority land use within the catchment area surrounding this bathing water is improved grassland and arable horticulture with smaller areas of dense shrub heath and acid grass. The geology of the region close to Tyrella bathing water is tertiary geology with various intrusives and lower Palaeozoic (Silurian) of the Hawick group.

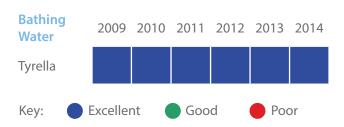
Two minor rivers enter the bathing area; one at the eastern end and the other close to the main access point onto the beach.

The wider area is contained within the Strangford and Lecale Area of Outstanding Natural Beauty and the Murlough Special Area for Conservation. Tyrella bathing water and sand dunes are within Tyrella and Minerstown Area of Special Scientific Interest.

### **Bathing Water Quality History at Tyrella**

Tyrella 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.

#### Tyrella 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 Tyrella bathing water is typically 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 Tyrella beach?

This is a rural area. There is no municipal waste water system.

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

There is housing in the immediate vicinity of the beach which is all served by private septic tanks.

All sewerage systems must be appropriately maintained if nuisance and pollution are to be avoided. Septic tanks also have the potential to cause localised pollution, but there is no evidence to suggest that this is impacting Tyrella bathing water.

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

Agriculture is a major industry in Northern Ireland and the majority of land cover within the catchment area of Tyrella bathing water is improved grassland and arable horticulture. The two rivers which enter the bathing water flow through this agricultural area. 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. This is why there is general advice not to bathe during or up to 2 days after such rain.

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.

### 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.

Tyrella is located in the North Eastern River Basin Management Plan within the South Down local management plan - further details can be found at www.doeni.gov.uk/niea/southdown\_lma\_ actionplan.pdf

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

In the period 2011-2014 there was one confirmed pollution incident within 3kms of the bathing water. Although this occurred during the bathing season it did not affect the 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)

Tyrella 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: Marine Division. InfoRequests@doeni.gov.uk

Phone: 028 9262 3244

Water Pollution 24hr Hotline

Phone: 0800 807060

**Local Authority** Newry, Mourne and Down

District Council
Downpatrick Office
Downshire Civic Centre
Downshire Estate
Ardglass Road
Downpatrick
Co. Down
BT30 6GQ

Phone: 0300 013 2233

Bathing water sampling transect Tyrella bathing water area Rivers Key MOUN Hally Murphystown Ringmore Point Rathmullan Point Glebe Sloak Rock Dilisk Rock a Fringlan Hall ) Ringsallin Point CRAIG HILL

1.6 Kilometres

0.8

0.4

0 0.2 0.4

1-20,000

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Map 1

**Potential Pollution Sources Tyrella Bathing Water-**

- Bathing water sampling transect Tyrella Bathing water area 0.8 Kilorneters ΚĒ 0.6 0.4 0.2 0.2 0.1 0 1:10,000 Crown copyright and database right 2013 DMOU 206

Map 2 Tyrella 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