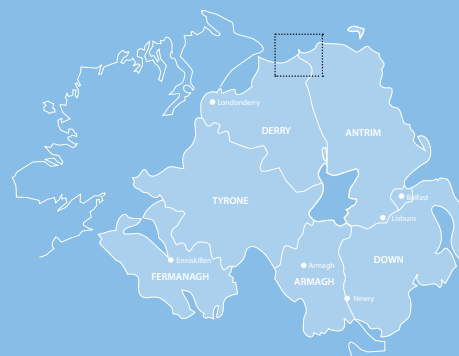


Bathing Water Profile

Downhill

May 2021



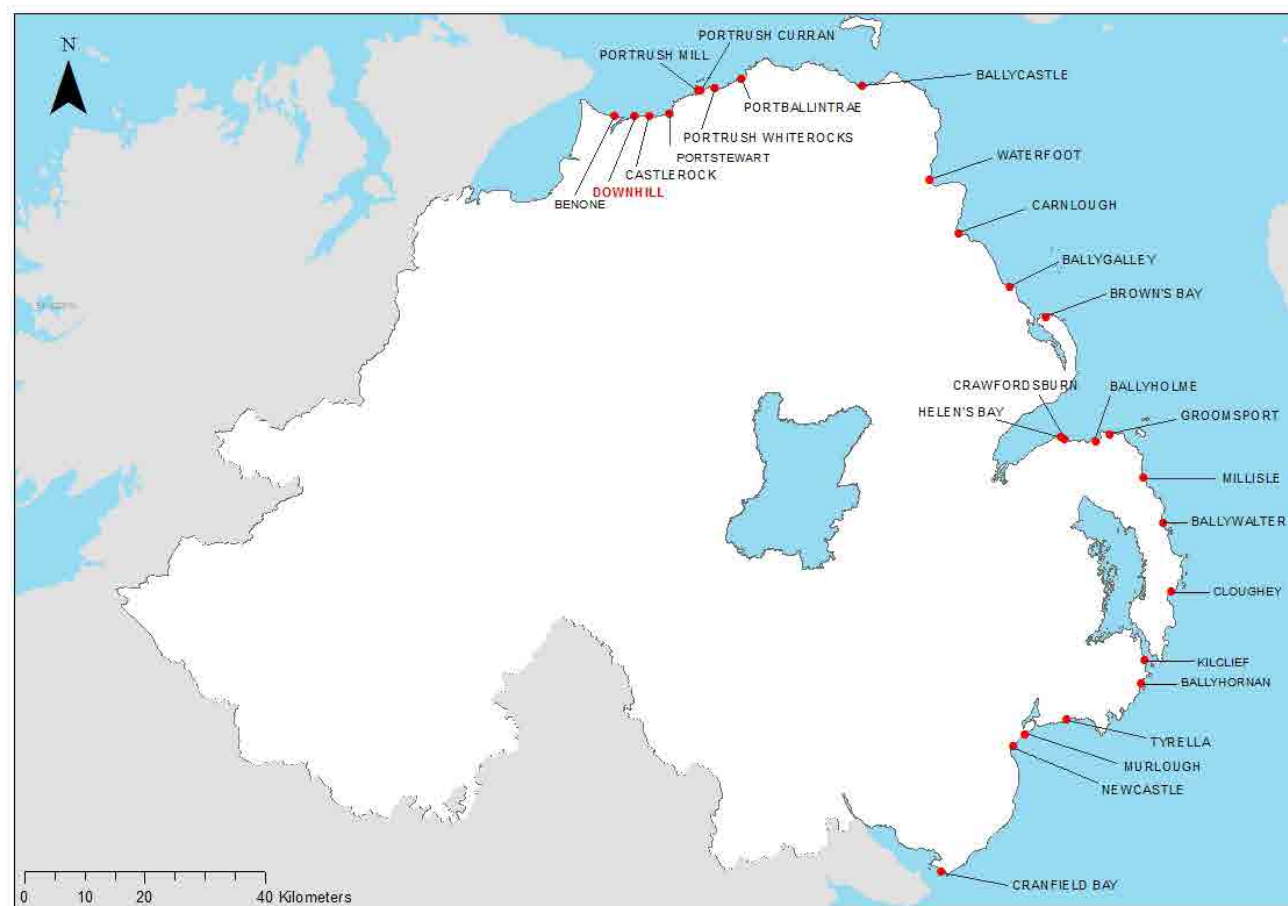
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Map of Northern Ireland's Bathing Waters 2021



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 requirement, under the Quality of Bathing Water Regulations (Northern Ireland) 2008 (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 web site (www.nidirect.gov.uk/articles/bathing-water-quality). Waters are then classified annually as Excellent, Good, Sufficient or Poor, as defined by the Quality of Bathing Water Regulations (Northern Ireland) 2008.

Key Information

Bathing Water Name	Downhill Bathing Water
EU bathing water ID number	UKNO4_47500
Location	UK/Northern Ireland/County Londonderry/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, 4 kilometres in length, contiguous with Benone Bathing Water
Monitoring Point	West of cemented access onto beach, C 7503 3627, (Map 2)

A Description of Downhill bathing water and the surrounding area

Downhill is a popular bathing water located on the north coast of Northern Ireland. The beach is contiguous with Benone bathing water, having a combined length of approximately four kilometres. The bathing beach is comprised of sand and rock and is backed by sand dunes, a railway track, a coastal road and cliffs.

There is a small residential area at the entrance to the beach.

The catchment is rural with the dominant land use being agriculture: improved grassland and arable horticulture. Neutral grass, coniferous forest, acid grass and open dwarf are also present. The main geology in the area is igneous and sedimentary rock of the Triassic, Jurassic and Tertiary age. Within this catchment there is no large urban settlement, the nearest urban area is Castlerock, which is located approximately 3 km to the east.

There is one small river which flows across Downhill bathing beach. This river flows through a predominantly rural environment and therefore might be influenced by agriculture. Another small river flows out at the adjacent Benone beach. Between these two there are other minor outlets which occasionally discharge to the beach. They are also from a predominantly rural environment

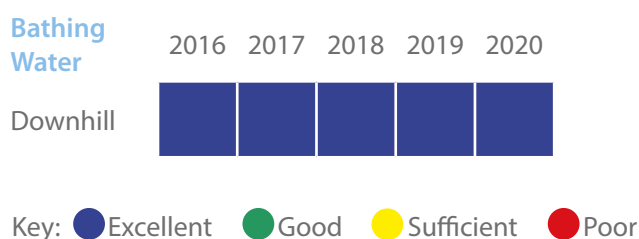
and may affect the water quality at Downhill during periods of heavy rainfall.

As Downhill is situated in a very rural part of Northern Ireland there is no major influence from residential areas.

Bathing Water Quality History at Downhill

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

Downhill Bathing Water Quality 2016-20



In 2015 the 1976 Bathing Water Directive was replaced by the European Bathing Water Directive 2006/7/EC. This revised directive was transposed into Northern Ireland regulations through the Quality of Bathing Water Regulations (Northern Ireland) 2008 and 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.

Due to the COVID-19 pandemic the Department carried out a reduced sampling programme at all identified bathing waters in Northern Ireland in 2020. Each bathing water was sampled on 5 occasions throughout this bathing season.

Potential sources of pollution and measures to reduce the impact at the bathing water

It should be noted that weekly classification at Downhill 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.

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

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

There is a small waste water treatment works less than 2 km from the bathing water (Map 1). The majority of sewage generated in this area is treated at the new WWTW approximately 10kms west of the bathing water.

Are there other risks of pollution from waste water systems?

Downhill beach does not have a large urban area and therefore may not be affected by this source of diffuse pollution. However, the small residential area has the potential to effect water quality 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 of 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. If systems are not designed in that way, then sewers may overflow into residential areas. Within the Downhill area there are wastewater pumping stations with associated 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 Waste Water Treatment Regulations (Northern Ireland) 2007 (www.daera-ni.gov.uk/articles/urban-waste-water) and the

Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017.

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 accounts for approximately 70% of the total Northern Ireland land area of 1.4 million hectares, and characterises much of the rural landscape. The agricultural industry is predominately grass based, with grazing livestock accounting for more than two-thirds of the gross industry output. Agriculture and the agri-food sector makes a very important contribution to the economy of Northern Ireland.

The most significant pressures on water quality are from the release of the nutrients phosphorous and nitrogen from agricultural sources. Agriculture can also give rise to sediment entering waters due to the damage caused to river banks and lake shores by livestock trampling and from other types of land disturbance e.g. ploughing and overgrazing. Agricultural activities are also a source of certain microbial vectors causing human illnesses including cryptosporidium and e-coli bacteria which can be an issue in bathing water areas. Other pressures from agriculture include the contamination of waters from hazardous chemicals, such as pesticides and sheep dip.

The Nitrates Action Programme and the Phosphorous Regulations have been revised and combined into the **Nutrients Action Programme (NAP) 2019-2022**. The Nutrient Action Programme (Amendment) Regulations (Northern Ireland) 2019 came into operation on 15 October 2019. The revised NAP has new measures to promote more efficient nutrient management and best practice.

The **Knowledge Advisory Service (KAS)** was set up in April 2018 as a single advisory service aimed

at supporting Northern Ireland's farm and food businesses.

The **Environmental Farming Scheme (EFS)** is DAERA's agri-environment scheme under the Rural Development Programme 2014-2020. EFS has been designed to address specific environmental needs, primarily relating to biodiversity and water.

The **Sustainable Agricultural Land Management Strategy** for Northern Ireland was published in 2016 and contains further recommendations aimed at reducing phosphorus levels and managing agricultural land more effectively.

The catchment area of Downhill has a significant amount of improved grassland and arable horticulture.

Septic tanks also have the potential to cause localised pollution, but there is no evidence to suggest that this is impacting Downhill 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.

Downhill is located in the North Western River Basin Management Plan - further details can be found at www.daera-ni.gov.uk/publications/north-western-river-basin-management-plan-2015-2021

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

From 2017-2020 there were twenty-three confirmed incidents of pollution in the Downhill area. Seventeen of these incidents occurred during the bathing seasons, four of which were reported by DAERA Marine and Fisheries Division.

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)

Downhill 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

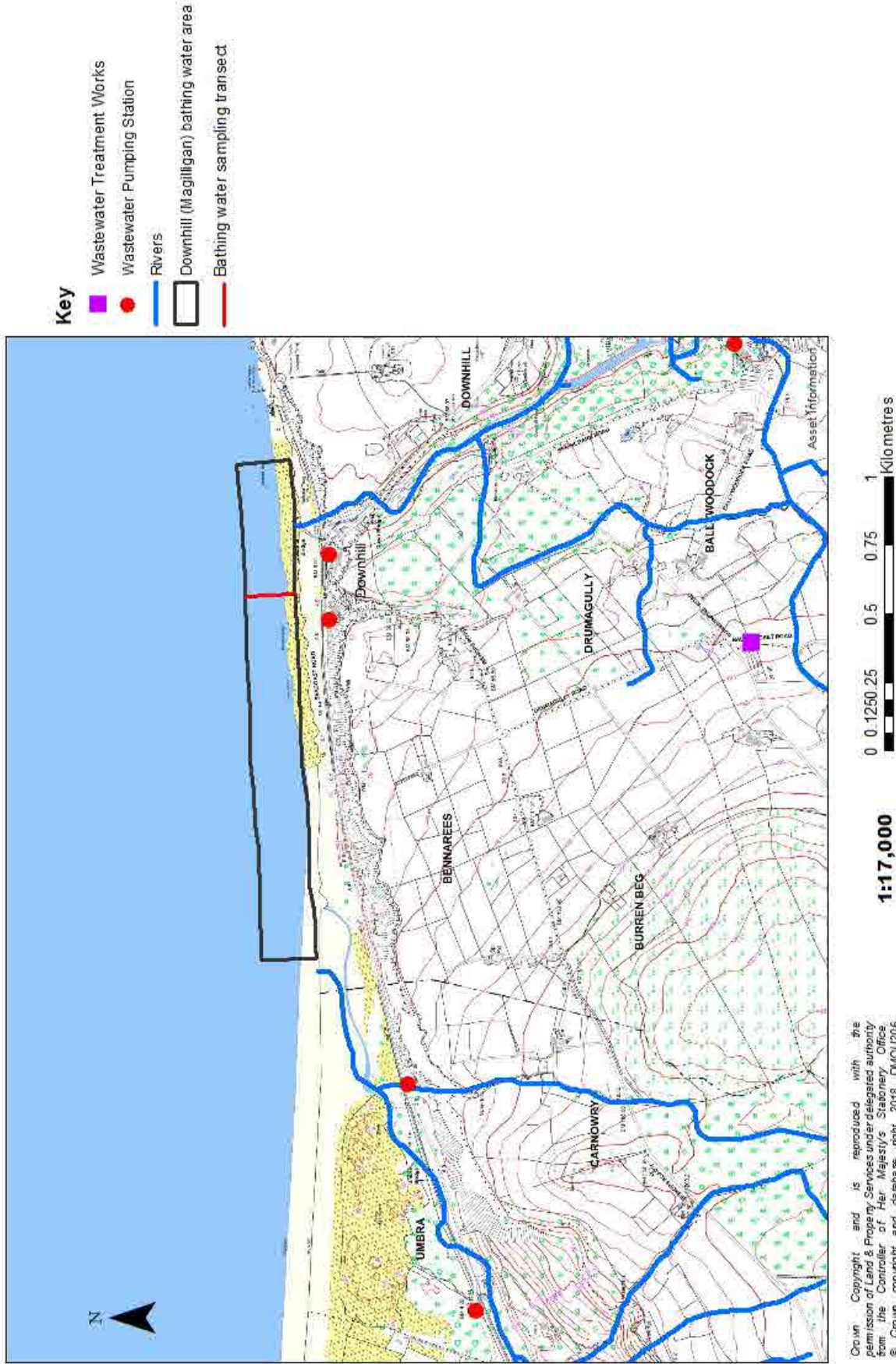
For general information about bathing waters:

DAERA Marine and Fisheries Division
17 Antrim Road
Tonagh
Lisburn, BT28 3AL
Email: Marine.InfoRequests@daera-ni.gov.uk
Phone: 028 9262 3244

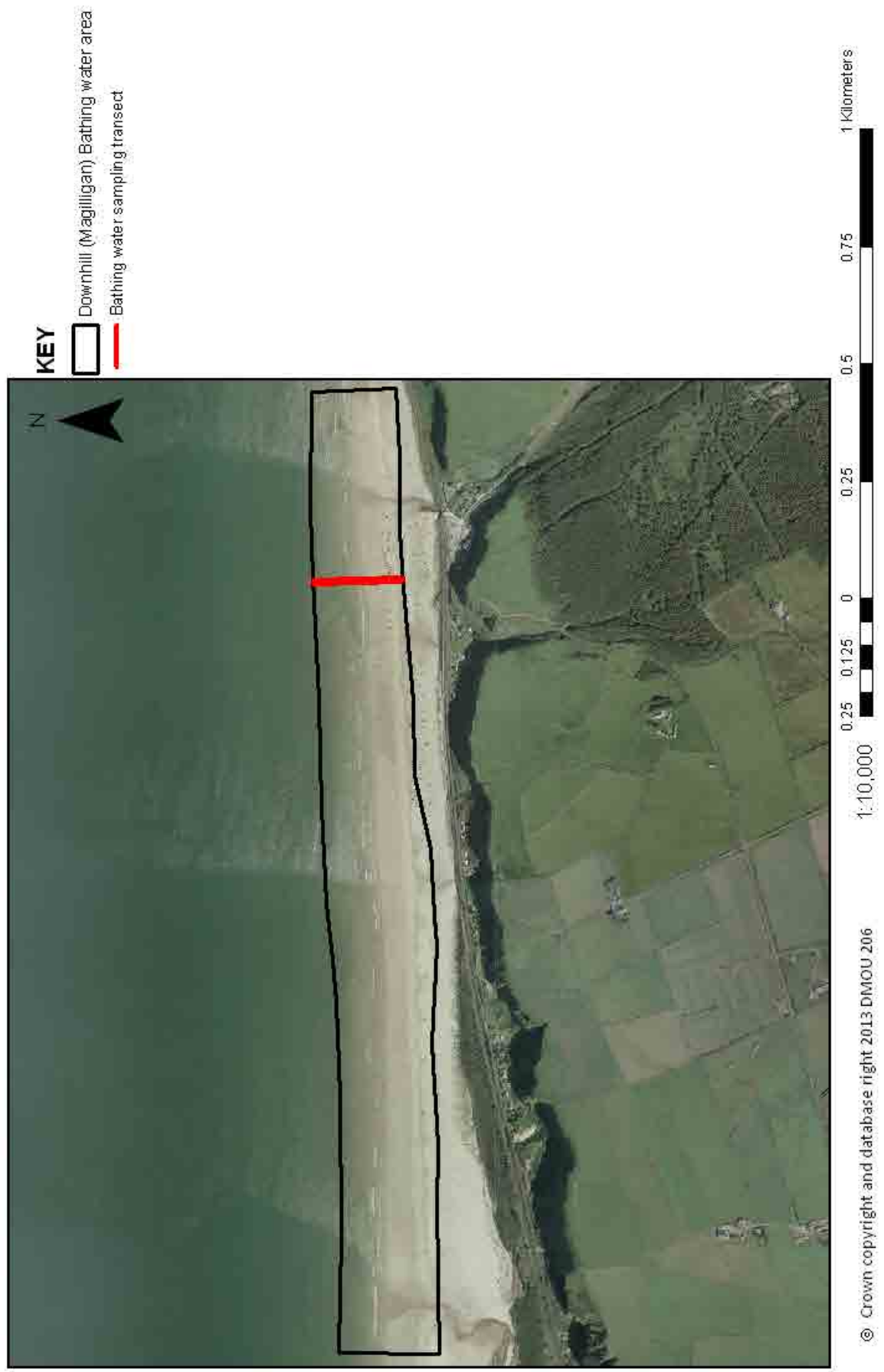
Water Pollution 24hr Hotline Phone: 0800 807060

Local Authority Causeway Coast and Glens Borough Council
Cloonavin
66 Portstewart Road
Coleraine, BT52 1EY
Phone: 028 70347034

Map 1
Downhill Bathing Water -
Potential Pollution Sources



Map 2
Downhill Bathing Water -
EC Bathing Water Sample Location



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