NORTH DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET NUMBER 3 GIS Code ND009 Dunagree Point Dunagree Head, Inishowen Lighthouse, Stroove Lighthouse IGH13 Coastal Geomorphology Stroove, Carrowtrasna, Carrowhugh Greencastle 13, 22 668185E 942755N (Strand at White Bay) GSI BEDROCK 1:100,000 SHEET NO. 1

Outline Site Description

A coastal section of sandy beaches and rocky ridges, at the most eastern point of the Inishowen peninsula, just outside the mouth of Lough Foyle.

Geological System/Age and Primary Rock Type

Shoreline Dalradian Supergroup outcrops and ridges are oriented NE-SW. Bedrock comprises grits and schist (Inishowen Head Grits and Phyllites; Greencastle Green Beds). Sand deposits have accumulated forming the beaches in the last 10,000 years since the end of the last major Ice Age and are Holocene in age.

Main Geological or Geomorphological Interest

The shoreline at Dunagree Point comprises a series of low rocky ridges oriented NE-SW (direction of geological strike). Most of this low-lying coastal area is at an elevation below 10m. Along the shore, pocket beaches of sand open northeastwards. The beaches have formed by in-washing of sand from the sea floor.

The coastal, terrestrial landscape between Greencastle and Dunagree Point is characterized by a belt of low ground that rises abruptly from around 15m to over 50m above sea level. During the last glaciation, the shoreline between Greencastle and Dunagree Point was over 20m higher than present sea-level, such that low ground along this coastline was submerged for significant periods of time during the last glaciation.

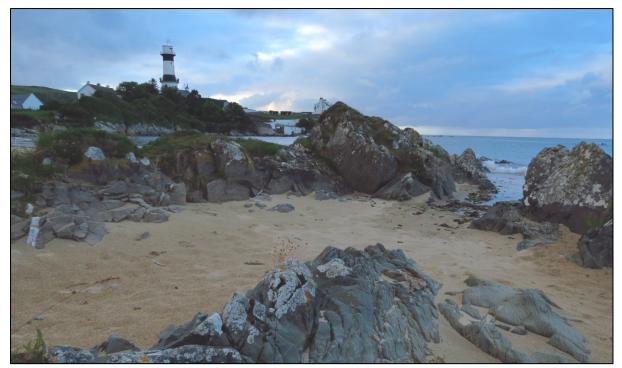
The geological contact (transition from one rock type or unit) between the Inishowen Head Grits and Phyllites and Greencastle Green Beds can be seen in the bedrock outcrops in the middle of the small beach to the very south of the lighthouse.

Site Importance – County Geological Site; may be recommended for Geological NHA

This County Geological Site is important to the understanding of past environmental conditions along the north coast of Ireland following the end of the last major Ice Age.

Management/promotion issues

This scenic site is easily accessed, and set in a significant geographical setting on the very east end of the Inishowen peninsula near the mouth of Lough Foyle. Together with the County Geological Site at Inishowen Head, this site is ideally suited for the promotion of geological heritage both in literature pertaining to the area, and on public information panels at beach and viewpoint parking sites.



Outcrop of lithological contact between Inishowen Head Grits and Phyllites (left, NW) and Greencastle Green beds (right, SE) looking north towards lighthouse.



White Bay Beach, Dunagree Point, and Inishowen lighthouse viewed looking southeast from Inishowen Head.

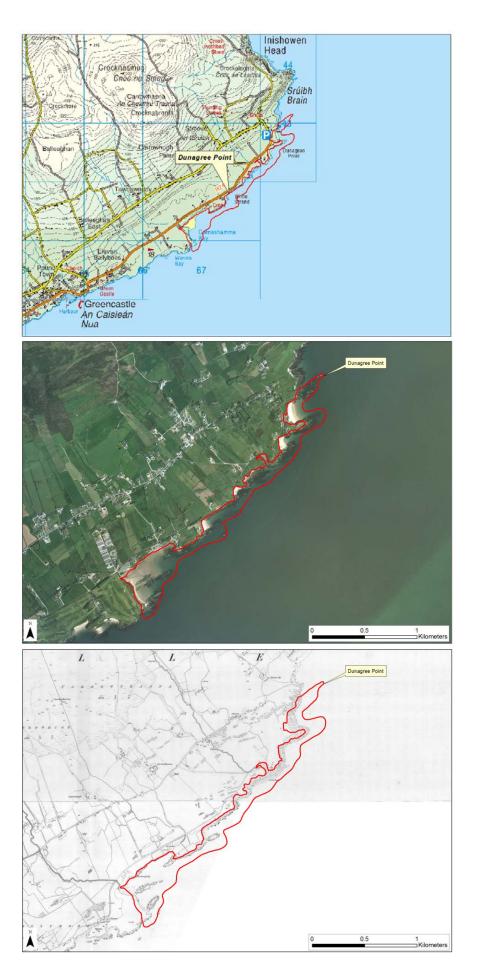


Beach on south side of Dunagree Point looking east towards Portstewart.



High tide at Cornashamma Bay looking northeast. Rocky ridges above water level.

Hennessy et al. 2019. Geological Survey Ireland.



Hennessy et al. 2019. Geological Survey Ireland.