# **DONEGAL - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBERS ITM CO-ORDINATES 1:50,000 O.S. SHEET NUMBER: 11 GIS Code DL036 Lúba na Finne River Finn Meanders, River Finn IGH14 Fluvial and Lacustrine Geomorphology Bellanmore, Meenagolan, Montymeane, Glashagh More Fintown 97 197214, 401617 GSI BEDROCK 1:100,000 SHEET NOs. 3, 4

# **Outline Site Description**

The site comprises a number of tight meanders along the course of the River Finn, east of Fintown.

# Geological System/Age and Primary Rock Type

The river valley and the channel pattern within are of Holocene Age, but the river may exploit a subglacially-eroded meltwater channel.

# Main Geological or Geomorphological Interest

Meanders are bends in a sinuous river, and are formed when the moving water in a stream erodes the outer banks and widens its valley; the inner part of the river then has less energy and deposits what it is carrying. The result is a snaking planform as the stream meanders back and forth across its down-valley axis.

The River Finn, a tributary of the River Foyle, exhibits approximately 10 meanders along a 1.1 km stretch just south of Bellanamore Village; such a concentration of meanders is highly unusual in the mountain rives of Donegal.

The river also exhibits a number of classic landforms associated with meandering along this stretch, including slip off slopes, river cut cliffs, incised meanders, abandoned meanders and scroll bars. Interestingly, no ox bow lakes have yet formed; these are usually the classic feature of tightly meandering rivers.

### Site Importance – County Geological Site

This site is unusual in that Donegal mountain rivers do not often have meandering stretches, except in their lower reaches close to the sea.

### Management/promotion issues

The meanders are visible from the R252 road at Bellanamore, but a superb view is had by turning southwest off this road just west of the village, and then taking the minor road southeastwards up the slopes of the ridge at Glashagh. The formation of the meanders in the context of the Holocene/Quaternary history of the area could be promoted *via* an appropriately located information panel.



The tight meanders in the upper River Finn, east of Fintown.



The straight-channelled River Finn just upstream of the meanders.







McClure et al. 2019. Geological Survey Ireland.