# LEITRIM - 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 16 GIS CODE LM012 Fowley's Falls Fowley Falls, Rossinver Waterfall IGH14 Fluvial and Lacustrine Geomorphology Aghnahaha, Derrynahimmirck Rossinver 5 591185E 847970N GSI BEDROCK 1:100,000 SHEET NO. 7

# **Outline Site Description**

Fowley's Falls are a series of spectacular waterfalls which spill over limestone steps in a deep, V-shaped channel.

## Geological System/Age and Primary Rock Type

The bedrock comprises Mississippian (Lower Carboniferous) interbedded limestone and shale of the Glencar Limestone Formation and shale and calcarenite of the Benbulben Shale Formation (c. 330 Ma). The V-shaped valley is Quaternary in age, and the waterfalls themselves are likely to have been present at this location only since glacier ice retreated from the area, approx. 14,000 years ago.

### Main Geological or Geomorphological Interest

The outcrops along the Glenaniff River, between 1 and 2km west of Rossinver, expose a section through the Glencar Limestone Formation of the Lower Carboniferous succession, and its contact with the Benbulben Shale Formation. The river has eroded the limestone to form a deep river gully, and forms a spectacular torrent of water rushing through the steep valley towards Lough Melvin.

These rocks, form a set of discrete cliffs, each several metres high, and the river cascades over them to form a series of cliffed waterfalls.

#### Site Importance – County Geological Site

The waterfall is a beautiful example of how a powerful stream can cascade over a series of bedrock interbeds, and is worthy of County Geological Site status.

#### Management/promotion issues

Fowley's Falls are within the Lough Melvin SAC and proposed NHA. The site is popular with tourists and walkers and the site is well-served by the council car park on the roadside half way down the falls. From the car park a short gravel pathway leads to a descent that then travels up past the waterfalls. A nice picnic area with benches has been created, and a signboard explains the flora and bird life of the locality. The site is well sign-posted in the region and the only suggested further promotion might be the inclusion of a sign-board explaining the geological origins of the waterfalls, and the bedrock of their river bed.



Some of the uppermost, stepped cascades of waterfalls at Fowley's Falls.





The small picnic area at the entrance to the falls walkway.

Higher cascades mid-way down the falls walkway.



One of the more spectacular waterfalls along the Fowley's Falls walkway.



Parkes et al., 2020. Geological Survey Ireland.