

## MAYO - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	Owenbrin River
Other names used for site	
<b>IGH THEME</b>	<b>IGH14 Fluvial and Lacustrine Geomorphology</b>
<b>TOWNLAND(S)</b>	<b>Shanvallycahill, Gortmore, Killateeoun, Lettereeneen, Barnahowna, Dirkbeg</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Tourmakeady</b>
<b>SIX INCH MAP NUMBER</b>	<b>116, 108</b>
<b>ITM CO-ORDINATES</b>	<b>503970E 763520N (north of Killateeoun bridge)</b>
<b>1:50,000 O.S. SHEET NO. 38</b>	<b>GS1 BEDROCK 1:100,000 SHEET NO. 11</b>
<b>GIS Code MO085</b>	

### **Outline Site Description**

This site comprises a braided river that flows SE for 13km from a corrie valley on the NE side of the Maumtrasna Mountains, and meanders past Killateeoun, and drains into Lough Mask at Shanvallycahill.

### **Geological System/Age and Primary Rock Type**

The braided river follows a course through a glaciated valley, and has developed in its current form in the Holocene (post-glacial) Period. The macro-morphology of the valley may be a relic of repeated Quaternary glaciations.

### **Main Geological or Geomorphological Interest**

A tributary of Lough Mask, the Owenbrin River is a fast-flowing braided/transitional to braided river. The river follows the floor of glaciated valley. The riverbed is very coarse with large, rounded fluvio-glacial sediments. The main river drains from the north-eastern side of the ice-scoured Maumtrasna massif mountain range. The river is joined by northeast flowing tributaries draining corrie lakes (Dirkbeg Lough, Lough Nadirkmore and Lough Nambrackkeagh) on the Maumtrasna mountains; and by south and southwest flowing tributaries draining from the Partry Mountains. The river follows the floor of the glaciated valley of Barnahowna. The Owenbrin River enters Lough Mask at a delta of coarse sediment deposits. A wide shallow river, the water flow can be fast after heavy rains.

### **Site Importance – County Geological Site**

The Owenbrin River is a tributary of Lough Mask. Lough Mask is part of the NPWS designated Lough Carra/Mask Complex SAC (No. 001774). The river was subject to fish sampling surveys conducted in 2008/2009 for WFD. The river is interesting as a braided river, and for the coarse river sediments along its course, and is an important county geological site.

### **Management/promotion issues**

This is a macro-scale feature, and has relatively few management issues. It can be a turbulent river, and as such the main river bed channel can change slightly (within the main limits of the braided river channel). Boulders from the river have been traditionally used to build walls and other smaller structures. This is a characteristic feature of the local landscape, and future use of river materials in this low-impact manner is not considered to be a threat. Large scale extraction of the river deposits should be discouraged.



Looking downstream (SE), from the northern bank of the Owenbrin River, by the roadside riverbank on road to Barnahowna.



Conglomerates (Derryveeny Formation) in the Owenbrin riverbed 50m north of the Shanvallycahill – looking east (downstream).



Looking upstream from road to Barnahowna (elevated road 300m north of bridge at Killateeaun).



Loose boulders and cobbles in riverbed 25m to NE of main channel of Owenbrin River - looking upstream. In full flow, river floods along this channel.



Loose boulder deposits on riverbank just north of the upper bridge over the river near Barnahowna.



