

County: Greater Manchester/
Derbyshire **Site Name:** Ludworth Intake

District: Stockport/High Peak

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended.

Local Planning Authority: Stockport Metropolitan Borough Council
High Peak Borough Council

National Grid Reference: SJ 994911 **Area:** 5.14 (ha) (ac)

Ordnance Survey Sheet 1:50 000 109 **1:10 000** SJ 99 SE

Date Notified (Under 1949 Act): – **Date of Last Revision:** –

Date Notified (Under 1981 Act): 11 September 1998 **Date of Last Revision:** –

Other Information:

This is a new site.

A Geological Conservation Review (GCR) site.

Description and Reasons for Notification:

Ludworth Intake is a prominent meltwater channel on a low col situated on the watershed between the main Etherow Valley and a small tributary of the River Goyt, about ten kilometres east of Stockport. The channel is about 400 m long, sinuous in plan and 8 m to 10 m in depth. It has a southward tending gradient for the most part.

Originally interpreted as a lake spillway for an ice-dammed lake in the Etherow Valley, the valley is now interpreted as the result of erosion by a meltwater stream which followed a lateral course along the margin of the glacier. Alternatively, the channel may have formed below the glacier. A temporary section cut in the wall of the channel has revealed five separate layers of soliflucted material indicating a complex periglacial history. One of the soliflucted layers yielded pollen grains consistent with the Windermere Interstadial, indicating that the channel is at least older than the Loch Lomond Stadial.

Meltwater channels are a characteristic feature of the geomorphology of the western flanks of the Pennines which were glaciated during the Quaternary. Ludworth Intake is an exceptional and nationally important example of an isolated col channel cut by glacial meltwater; the site has considerable potential for further study.