NAME OF SITE       Lough Nahanagan
Other names used for site  Lake forms part of ‘Turlough Hill’
IGH THEME          IGH7 Quaternary
TOWNLAND(S)        Sevenchurches, Brockagh
NEAREST TOWN/VILLAGE Laragh
SIX INCH MAP NUMBER 17
NATIONAL GRID REFERENCE 707900E 699000N (centre of lake)
1:50,000 O.S. SHEET NUMBER 56
GSI Bedrock 1:100,000 Sheet No. 16

Outline Site Description
Lough Nahanagan rests within a deep glacial corrie, situated in the central portion of the
Wicklow Mountains, 6.3 kilometres west-northwest of Laragh and just south of the Wicklow
Gap.

Geological System/Age and Primary Rock Type
The feature was formed during the Quaternary (Ice Age), by glacier ice scouring out a deep,
armchair-shaped hollow at the northern edge of Camaderry Mountain.

The majority of the feature therefore comprises ice-scoured bedrock, which is adamellite
granite. The granite is part of the Lugnaquillia Pluton which is one of the five plutons that
comprise the late-Caledonian (405 Ma) Leinster Granite batholith.

Main Geological or Geomorphological Interest
This corrie has an almost-vertical backwall up to 240m in height. A tarn (glacial lake) floors
the feature and the corrie and lake are bounded on their northeastern side by a series of
moraines, which have been dissected by a Holocene (post-glacial) river draining the lake.

The moraines comprise well-drained, bouldery material, and the area around and northeast
of Lough Nahanagan is littered with large erratic boulders up to 10m across. Many of these
erratic weigh several hundred tonnes and bear testament to the power of the ice sheet
which transported them. Small moraines sit on top of a very large and impressive moraine
feature, which dams the lake. Many of the smallest moraines are drowned by the lake water.

The smallest, underwater moraines were dated to the ‘Younger Dryas’, which was a cold
snap at the end of the last glacial period. This period is therefore termed the Nahanagan
Stadial in Ireland. They can be seen when the water levels in the lake are low following
pumping to the upper reservoir of the Turlough Hill electricity pumped-storage system which
the lake now forms part of.

Much of the granite bedrock around the lake has been moulded by glacier ice, and shows
striations, chattermarks, roche moutonnées and whaleback forms.

Site Importance – County Geological Site; recommended for Geological NHA
This is a fine example of a corrie, with a bounding moraine feature. The site is already part of
the Wicklow Mountains SPA, SAC and proposed NHA (Site Number 002122), as well as
being within the National Park. The fact that the post-glacial period in Ireland is called the
Nahanagan Stadial, following dating of the moraines at the base of the lake, demonstrates
that the feature is significant within many scientific disciplines.

Management/promotion issues
The corrie is now the site of an electricity pumped storage scheme and has an access road
leading up to it. Tours were offered of the facility in 2014, when ‘Turlough Hill’ had its 40th
Anniversary; if this tour is continued, even occasionally, some glacial aspects could be
incorporated. The site is already part of the Wicklow Mountains SPA, SAC and proposed
NHA (Site Number 002122), as well as being within the National Park.
The corrie at Lough Nahanagan, viewed from the Wicklow Gap to the north.

Lough Nahanagan, with the enclosing moraines seen at the far shore.

The 'underwater' bouldery moraine material exposed at the edge of the lake.

Ice-moulded bedrock along the shore of Lough Nahanagan.
Inside the visitor centre display area at Lough Nahanagan, July 2014.