

GALWAY CITY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	St. Augustine's Well
Other names used for site	St. Augustine's Well, <i>Loch a' t-Sáile</i>
IGH THEME	IGH16 Hydrogeology, IGH1 Karst
TOWNLAND(S)	Townparks
NEAREST TOWN/VILLAGE	Galway
SIX INCH MAP NUMBER	94
ITM CO-ORDINATES	528700E 726665N
1:50,000 O.S. SHEET NUMBER	45
GISCODE	GSI BEDROCK 1:100,000 SHEET NO. 14 GC010

Outline Site Description

A freshwater karst spring on the shore of a saline tidal lagoon, and the site of a well-known Holy Well.

Geological System/Age and Primary Rock Type

The bedrock comprises pale grey limestone of the Lower Carboniferous Burren Limestone Formation. The southern part of Lough Atalia, from the inlet channel to Renmore Army Barracks, is Ordovician-age Connemara Metagabbro and Orthogneiss Suite metamorphic rock. The spring is a karst feature probably originated during Cenozoic times (since 66 million years ago), or possibly even earlier.

Main Geological or Geomorphological Interest

Situated on the cityside shore of Lough Atalia, St. Augustine's Well is a freshwater spring where water emerges from underground karst limestone conduits, and flows a few metres into Lough Atalia. The source of water is understood to be in the east of the city, where karst features include estavelles at Terryland River sink/rising, enclosed depressions and at least one cave (Cooper's Cave). The spring well is in a small hexagonal trough surrounded by a low stone wall about 1m in diameter. In days gone by, the well was visited by pilgrims on the Feast of St Augustine (August 28th). There was a much held belief in the curative properties of the water. In his *History of Galway* (1820) James Hardiman notes two springs situated on the shoreline to the north and south of St. Augustine's Well, dedicated to the Virgin Mary and John the Baptist. The Archaeological Inventory of County Galway states that no trace remains of these two wells. All three wells are also shown on the 1st Edition OSI maps under the title *St. Augustine's Wells*, with later editions showing just two, and by the 1945 edition, only one well is recorded. Lough Atalia is a large estuarine lagoon (c. 40ha) connected to the sea (Galway Bay) via a narrow channel (rock sill barrier) under the Galway-Dublin railway bridge. A mesohaline-polyhaline waterbody, its Irish name *Loch a' t-Sáile* is indicative of its saline properties. Metamorphic outcrops occur on the southeast shore, midway between the bridge and Renmore Army Barracks. Lough Atalia is shallow (< 2m depth), though high tide depths of > 5.5m occur at the southwest end.

Site Importance – County Geological Site

This County Geological Site is important as a karst feature where freshwater emerges from underground conduits, transporting water from the karst areas of east Galway City. The well has historical significance as a place of devotion where pilgrims visited to avail of the apparent curative properties of the waters. Lough Atalia is located within Galway Bay Complex SAC and pNHA (000268). Interestingly, the site is not listed in the Geological Survey Ireland Groundwater Wells and Springs database.

Management/promotion issues

The well was restored by Galway Civic Trust in 2000 and is easily accessible from the Lough Atalia road. Any promotion of the well should take consideration of it being one of many features of Galway City's karst limestone landscape. It is a unique feature in Galway City, where coastal springs are rare.



St. Augustine's Well on the shore of Lough Atalia. Renmore Barracks in left background.



Water flowing from St. Augustine's Well to Lough Atalia.



Metamorphic outcrops on southeast shore of Lough Atalia.



Channel to Galway Bay beneath railway bridge.

