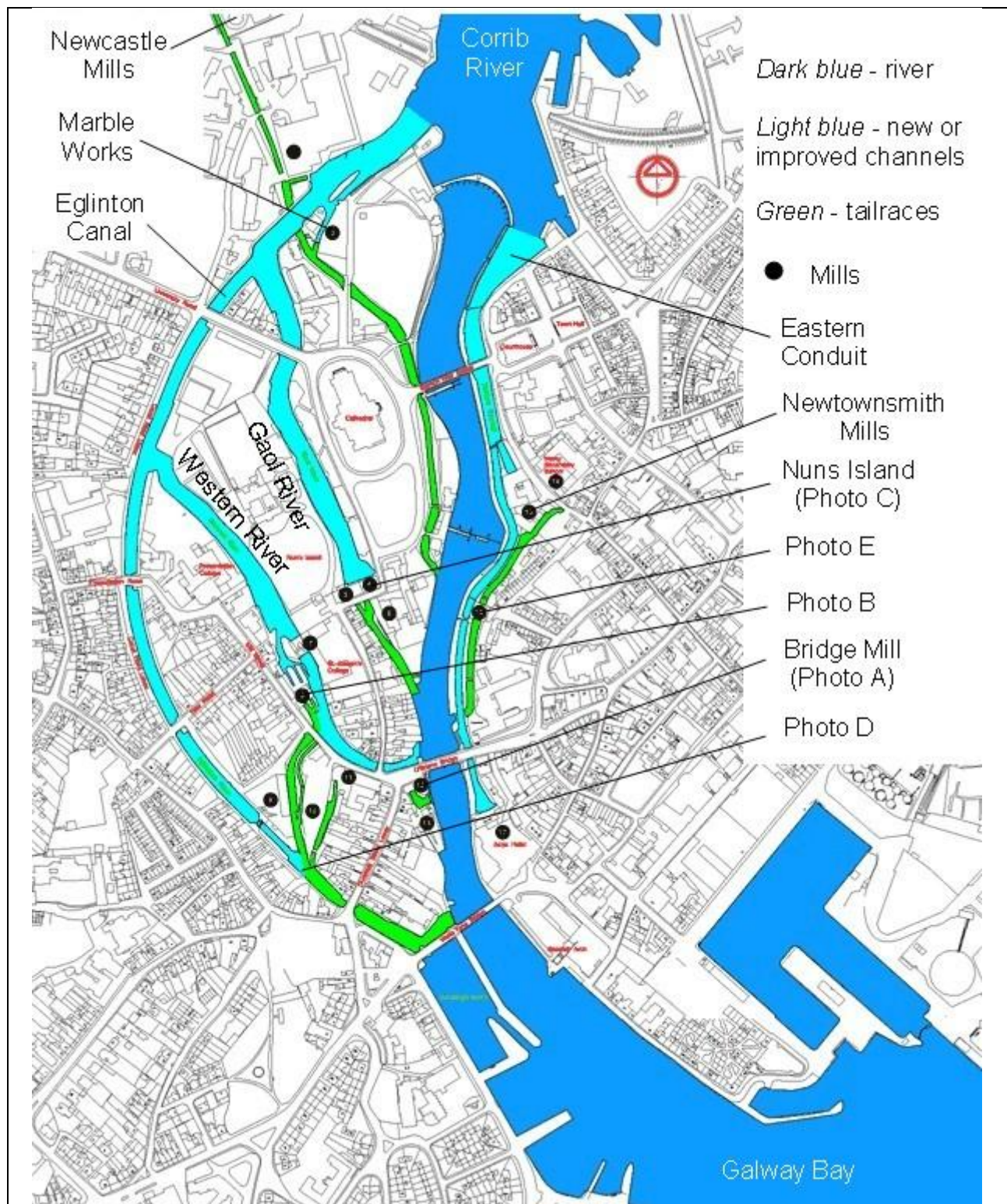


Galway Waterways

Ruth Andrews

Galway is situated on the Corrib River, which flows from Lough Corrib to the sea at Galway Bay. The map shows how natural drainage channels (including the Corrib River, Gaol River, and Western River) were utilised for the Loughs Corrib, Mask, and Carra Drainage and Navigation System, constructed between 1848 and 1858.



The primary purpose of the system was to improve drainage (reduce winter water levels and the areas of flooded land) and navigation in the respective catchments, and this was to be undertaken without detrimental effect on the mills or fishery interests. The winter flood level was reduced by 450mm (18in) and the tailraces from the various mills were deepened such that the water head was not impaired.



Photo A: Bridge Mills and River Corrib, with the outfall from the Western River on the right

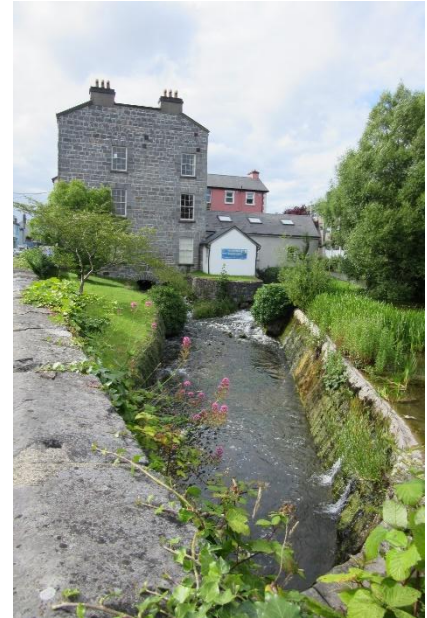


Photo B: Former flour mill on the Western River, now a Resource Centre

The scheme included the Eglinton Canal, which also served two main purposes, firstly as a navigation channel from the Claddagh Basin to Lough Corrib and secondly as a feeder channel to the Gaol River and Western River and the various mills they powered. It was about three quarters of a mile long, following a roughly semi-circular course around the west of the city, bypassing the main line of the river and many other watercourses.

By the mid-19th century the water channels powered approximately 30 mills, some of which are marked on the map. The navigation scheme had a beneficial effect on the mills, channel dredging had improved their watercourses, culverts had been improved to allow tailraces to run under headraces, the Eastern Conduit had been built, and a new deep tailrace had been constructed from the Newcastle Mills to the Marble Factory, and on to a discharge into the Corrib River.

As early as 1888 a hydropower station was in operation. The Galway Electric Light Company adapted the mills at Newtownsmith, and operated until 1929.



More recently, University College Galway purchased a flour mill situated on Gaol River at Nuns Island (*photo C, left*). When the building was being adapted, sections of a Francis turbine were discovered; Robert Craig & Sons of Belfast originally manufactured this 42kW turbine in 1932, and were able to refurbish it in 1981.

A second turbine was installed in the mid-1980s. This was also a Francis turbine but made entirely of plastic. It operates on a head of 2m and a discharge of $2.6\text{m}^3/\text{sec}$, and it has a power output of 32kW.



Photo D: The end of the canal (extreme left) and 2 tailraces

The Eglinton Canal was used until the early part of the 20th century. In 1880 tolls of £370 were collected, but these had reduced to £35 by 1905, and £1 by 1916. The last boat to use the canal was a 90ft yacht in 1954. By this time the swing bridges were in a poor state and it was decided to replace them with fixed bridges.

Walking round Galway today, the many water channels are a striking feature, but it is quite difficult to identify some of the mill sites.

Photo D: A flour and bark mill on the Eastern Conduit, which was used as a battery charging station before being converted to apartments.

