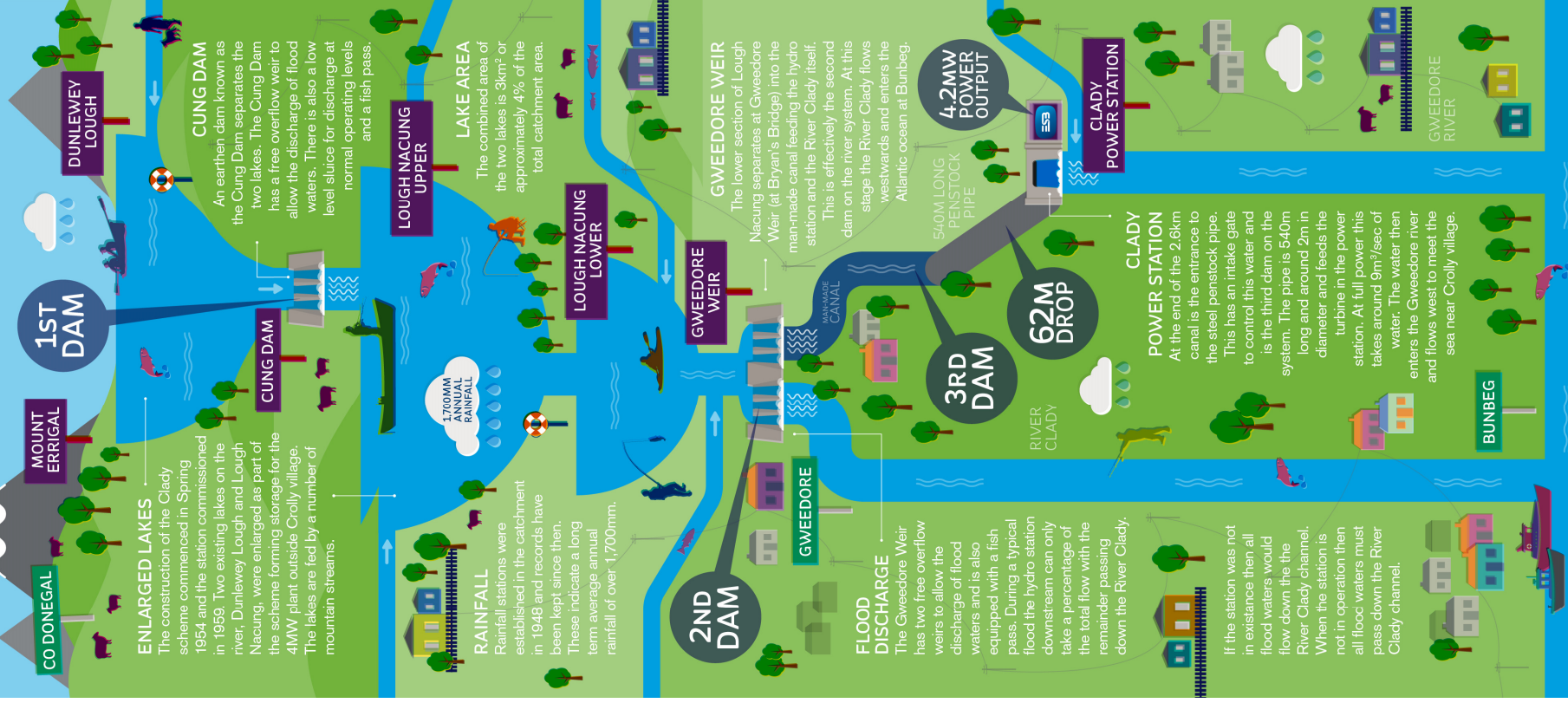


THE RIVER CLADY

The River Clady in Co Donegal has a catchment area of 80km² most of which is generally steep, mountainous country rising rapidly from an elevation of approximately 60m at the lakes up to 650m around the perimeter of the catchment area.



CO DONEGAL

MOUNT ERRIGAL

1ST DAM

DUNLEWEY LOUGH

ENLARGED LAKES

The construction of the Clady scheme commenced in Spring 1954 and the station commissioned in 1959. Two existing lakes on the river, Dunlewey Lough and Lough Nacung, were enlarged as part of the scheme forming storage for the 4MW plant outside Crolly village. The lakes are fed by a number of mountain streams.

CUNG DAM

An earthen dam known as the Cung Dam separates the two lakes. The Cung Dam has a free overflow weir to allow the discharge of flood waters. There is also a low level sluice for discharge at normal operating levels and a fish pass.

RAINFALL

Rainfall stations were established in the catchment in 1948 and records have been kept since then. These indicate a long term average annual rainfall of over 1,700mm.

1700MM ANNUAL RAINFALL

LOUGH NACUNG UPPER

LAKE AREA
The combined area of the two lakes is 3km² or approximately 4% of the total catchment area.

LOUGH NACUNG LOWER

2ND DAM

FLOOD DISCHARGE

The Gweedore Weir has two free overflow weirs to allow the discharge of flood waters and is also equipped with a fish pass. During a typical flood the hydro station downstream can only take a percentage of the total flow with the remainder passing down the River Clady.

GWEEDORE WEIR

The lower section of Lough Nacung separates at Gweedore Weir (at Bryan's Bridge) into the man-made canal feeding the hydro station and the River Clady itself. This is effectively the second dam on the river system. At this stage the River Clady flows westwards and enters the Atlantic ocean at Bunbeg.

GWEEDORE WEIR

The lower section of Lough Nacung separates at Gweedore Weir (at Bryan's Bridge) into the man-made canal feeding the hydro station and the River Clady itself. This is effectively the second dam on the river system. At this stage the River Clady flows westwards and enters the Atlantic ocean at Bunbeg.

3RD DAM

62M DROP

CLADY POWER STATION

At the end of the 2.6km canal is the entrance to the steel penstock pipe. This has an intake gate to control this water and is the third dam on the system. The pipe is 540m long and around 2m in diameter and feeds the turbine in the power station. At full power this takes around 9m³/sec of water. The water then enters the Gweedore river and flows west to meet the sea near Crolly village.

4.2MW POWER OUTPUT

540M LONG PENSTOCK PIPE

CLADY POWER STATION

BUNBEG

GWEEDORE RIVER