

Case study

Glen Lyn Gorge,

Power of Water Exhibition

DARE

Devon Association for Renewable Energy



Introduction.

Glen Lyn Gorge is situated in Lynmouth, is part of Exmoor National Park within a designated sight of special scientific interest. It is the site of the “Power of Water Exhibition” a visitor attraction where people can learn about renewable energy in a stunning natural setting.

Costs and benefits

- The hydro scheme produces an annual generation figure of 1.5 million kWh.
- The scheme contributes to a carbon saving of 795 tonnes of carbon dioxide per annum.
- The Oxenham family have worked hard to restore the estate, filling in landslides, restoring pathways and renovating the main house and cottages. The woodlands are managed and provide fuel for the log fires and under floor heating in the main house.
- The development at Glyn Lyn Gorge was made possible with financial support from the Exmoor National Park Sustainable Development Fund, provided by DEFRA

Project development

- The Energy Act 1983 encouraged the private generation of electricity.
- The hydroelectric system at Glen Lyn Gorge is connected to the National Grid. Due to its unobtrusive location in a natural setting no objections were raised during the planning process.
- After experiencing difficulties with the installation, a 20 inch pipeline was laid underground to the top of the gorge creating a fall of 250 feet and enough force of water to drive a 300 kW Pelton Wheel turbine.
- Later a second (stand by) turbine was installed.

How the system works.

The upper gorge leads to the impressive ravine where the intake works fill the underground pipe. The water then falls down the pipe to the hydro-electric turbine housed 75 metres below where it drives the 300KW Pelton Wheel. Turbine.

Technical details

Turbine

Pelton Turbine has a rated output of 300kW

Penstock

Single pipe of 20 inch diameter

Installer Company

Evans Engineering

Wider benefits

The sustainable use of wood fuel and hydro electricity are two types of renewable energy which help reduce the human impact on climate change. At Glen Lyn Gorge children of all ages can learn how electricity can be generated using alternative forms of energy with range of working models which include spinning water wheels and water cannons.

Further information

Hydro power plant, Lynmouth, North Devon, EX35 6ER.

Tel 01598 723207

Contact DARE

www.devondare.org

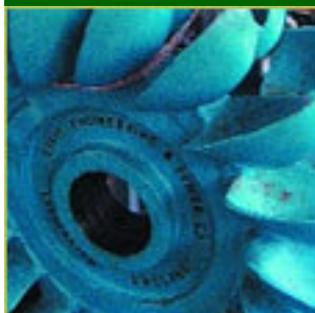
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Image Gallery

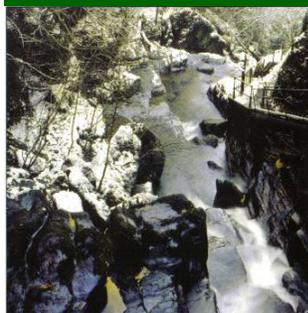
Turbine



Educating children about renewable energy



Winter in the Glen Lyn Gorge



West Lyn Gorge Turbine



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