

Figure 2 - Pelton type turbine, used in high head hydro schemes. Multiple jets allow the turbine to operate at varying levels of power output.



Figure 3 - Typical run-of-river intake weir. Screens (centre) allow water to drop into a settling tank (left) where it enters the pipe (buried on left bank). The plunge pool allows fish to navigate the structure unharmed.

If the public ballot is successful it is anticipated that the scheme would progress to planning stage in spring 2015 with construction and electricity generation by summer 2016.

If you have any questions regarding the proposed project please contact Eamon King at Colintraive Village Hall, PA22 3AS, eamon@cgdt.org or 01700 841358





# Glendaruel Community Hydro-electric Scheme

## Why are we sending you this leaflet?

Colintraive & Glendaruel Development Trust (CGDT) are seeking to go into partnership with Forestry Commission Scotland (FCS) to develop a community hydro-electric scheme in Glendaruel Forest.

#### What are the community benefits?

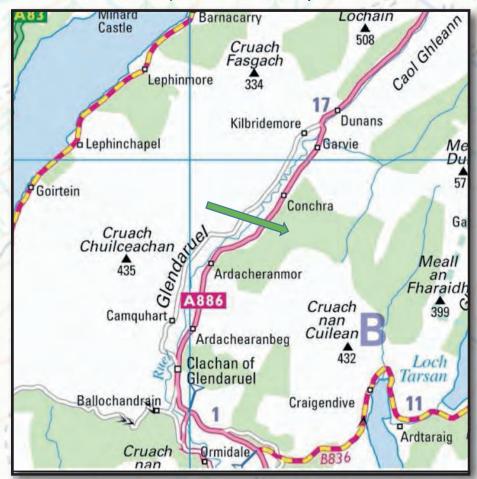
The average house in the UK consumes around 3,300 kWh of electricity per annum (OFGEM). An initial feasibility study has suggested that a 94KW scheme could be installed producing enough electricity per year to run over 100 households from this renewable energy source. This would also generate an annual gross revenue of around £76,000 per year. Around 50% of this revenue would be used to finance the loan required to develop the project with an anticipated 8 year payback period. The remaining 50% would be used to support employment, skills development and a training programme within the community as well as supporting development projects for many years to come.

The scheme would be developed on Forestry Commission land and fall under the National Forest Land Scheme Renewables Portfolio. It has the support of CGDT, FCS and the Community Council but before we can proceed we must also conduct a public ballot to see if the community is supportive of the scheme.

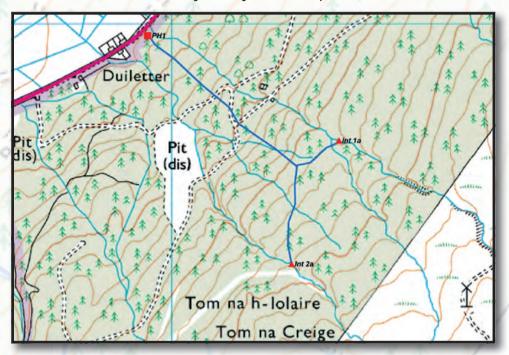
## What happens now?

On the 8th December voting packs will be despatched to all households in the community. We require at least a 50% response rate for the vote to count, so don't let this fantastic opportunity pass the community by. A stamped addressed envelope will be included in the pack to make it easy for householders to return their ballot slips. To make your vote count you should return the voting slips as soon as possible to make sure they are with the Electoral Reform Service by noon on January 5th 2015.

Location map1: Green arrow marks location of the scheme



Location map 2: Dark blue lines mark the location of the hydro pipes, PH1 the preferred powerhouse position with red triangles marking the water intake points.



# What will the development look like?



Figure 1 - Powerhouse of a small hydro scheme. Moss covered outfall into the burn seen on the left. Timber clad and sedum roof structure.