Plas Farm Pico Hydro Scheme

Rectangular unrestricted NOTCH COMPENSATION FLOW   BROAD CRESTED WEIR

Target Hands off Flow   **2.3** lps

Discharge	Q	0.0023 m^3/s
Coefficient of discharge	Cd	1.704
Acceleration due gravity	g	9.81 m/s

Depth*, d (m)	Width, w (m)	Discharge, Q m^3/s
0.080	0.060	0.00231

Formula
$Q = C_d\, w\, d^{1.5}$ where C_d is 1.704

FLOW SPLIT   **Unrestricted notch**   BROAD CRESTED WEIR

The weir crest and the flow split crest are open notches and the Open notch discharge formula can be used to evaluate the flows.

Formula
$Q = C_d\, w\, d^{1.5}$ where C_d is 1.704

	Depth*, d (m)	Width, w (m)	Discharge, Q m^3/s	**Proportion of Water**
Coanda Notch	0.050	0.500	0.010	**70.0%**
Flow Split Notch	0.050	0.214	0.004	**30.0%**

*Note - Depth varies depending on flow but is always the same for each notch as crest levels are all the same 411mAOD, the proportions always remain exactly the same and are not effected by changes in depth. Proportion of water is calculated by dividing the flow by the sum of both flows and converting to a precentage. Values are based to the nearest litre per second and millimetre.