



Case Study – Bowden Mill

*Domestic scale micro-hydro
installation at historic
mill site*

ern Renewable Energy



- *Existing mill in non-operational condition*
- *Salmonid river in National Park*
- *7m of fall*
- *Very capable owner looking for assistance on technical side*





- *Feasibility study already completed by other firm*
 - *hydrological modeling*
 - *Costing*
 - *Design*
- *Owner wanted extra opinion on design and different layout*
- *WRE provided Flood Risk Assessment*
- *WRE negotiated EA licenses (Transfer license to simplify licensing)*
- *WRE and owner developed detailed design*
- *Agreed schedule & cost*
- *WRE installed powerhouse equipment and screening*
- *Commissioning*





- *Powerhouse located downstream from original consultant's plan*
- *Fish screening agreed at forebay with fish bywash*
- *New WRE automatic stainless steel screener used*





- *100 l/s crossflow turbine*
- *Efficient flat belt drive*
- *Set out to WRE standard small crossflow layout*
- *5.5kW G83 grid connection*

- *Completed on time and on budget*
- *Quiet operation*
- *Spacious powerhouse*
- *Re-use of existing historic system brings mill 'back to life'*

