



## Small hydro from idea to operation

Discovery

Evaluation

Feasibility

Planning & approvals

Design

Construction

Commissioning

Operation

### Discovery

babyHydro use Hydrobot<sup>®</sup> to identify commercially viable small-scale hydro sites, and you can too. Hydrobot<sup>®</sup> is a comprehensive GIS-based predictive model designed to evaluate all the features that make a good site – without the need for a physical survey. This means you can then have an Evaluation carried out with confidence – on only the most promising sites.

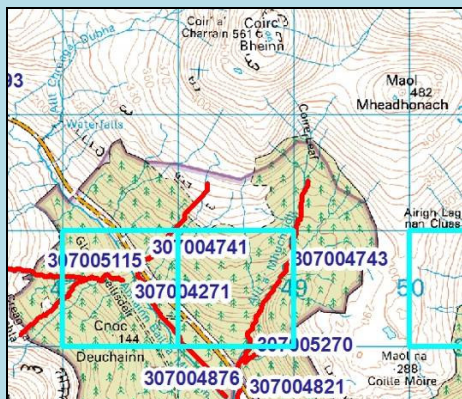
The auto-generated output of the model is a map of the area selected for assessment showing the potential hydro sites, and a detailed 6-page report, including;

- Identification of any commercially viable sites
- Critical design features used in the assessment
- Point of abstraction and point of return
- Quantity and value of electricity forecast to be produced
- Estimate of capital costs and lifetime profitability

A sample report is available on the Hydrobot<sup>®</sup> website – visit [www.hydrobot.co.uk](http://www.hydrobot.co.uk).

### Mull & Iona Community Trust

In November 2009 Hydrobot<sup>®</sup> was used to survey a large proportion of Mull on behalf of the Mull & Iona Community Trust as part of their Community Powerdown programme. The report identified 46 schemes ranging from 10kW to 788kW that looked attractive. Nine of these were subsequently selected for closer examination and babyHydro were pleased to carry out Evaluations, with funding from Community Energy Scotland and the Climate Challenge Fund.



© Crown copyright 2010. License number 100049709

### Prices

A standard Hydrobot<sup>®</sup> survey can be ordered for two sizes of tile – 1km<sup>2</sup> and 25km<sup>2</sup>. The basic fee is **£35 per km<sup>2</sup>** and the rate reduces for larger areas. Visit the website for details.

We also offer a more detailed survey including the flow exceedence points, whether the river is a salmon migratory route, and some main elements of cost such as the penstock, turbine and feasibility study. The fee for an Enhanced Hydrobot<sup>®</sup> survey is **£120 per km<sup>2</sup>**. Please contact us if you wish to order an Enhanced survey.

### How does Hydrobot<sup>®</sup> work?

Hydrobot<sup>®</sup> takes into account environmental data, available hydro technology and a host of financial factors, and tries out hundreds of layouts at each site. Each combination is fully costed and evaluated so that the best solution is found to suit the user's preferences. It is because the user can select the area Hydrobot<sup>®</sup> will examine, that the Scottish Government were able to commission Hydrobot<sup>®</sup> to survey the whole of Scotland in 2008 and 2009.

For further information, please contact Gordon Black on 07736 554 276 or [gordonblack@babyhydro.co.uk](mailto:gordonblack@babyhydro.co.uk)