

## CASE STUDY



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## Nant yr Arian Visitor Centre



### Rainwater system

- 10,000 L GRP tank  
Wisey WFF 150 vortex filter  
Single pump Multigo 40/06  
Expansion vessel

### Design data

- Architects: Rubyshine
- Usage: WCs and urinals
- Estimated usage:  
1,050 litres/day
- Average annual rainfall:  
1,051 mm
- Roof area: 266 m<sup>2</sup>
- Expected annual rainwater  
collection: 189 m<sup>3</sup>

- Estimated percentage of  
demand met by rainwater  
system: 49%

- Capital cost: £3,700 (2003)

- Estimated payback time:  
8.3 years (Based on Dwr  
Cymru Welsh Water

- tariff: 236p/m<sup>3</sup>)

- Completion: Spring 2003

### Other green design features

- Operating statistic: rain water  
collection and usage meters  
installed, monitoring on-going

### Project for Forest Enterprise Ceredigion, Wales.

Rainharvesting Systems Ltd. provided the rainwater harvesting system for this unusual visitor centre in Wales.

### Water

A rainwater harvesting system channels water from the roof to a 10,000 litre tank for flushing the toilets and the bike wash, reducing mains water consumption by 25%.

Dual flush cisterns in the toilets, push taps in the basins and other efficient plumbing fittings, equipment and controls have further reduced water consumption by 10%.