



**Sensitive discharge system
supplied by Bio-Bubble - Calbourne
Water Mill**

The scenic Calbourne Water Mill on the Isle of Wight now has the reassurance of Bio-Bubble waste water treatment to ensure the effluent will meet a very high quality before discharging into the Caul Bourne.

Caul Bourne is a small river with distance of around 3 km from Calbourne Water Mill to the Newtown River. The Newtown River is a designated biological Site of Special Scientific Interest (SSSI) supporting a number of nationally rare species of flora and a specialised invertebrate community. It also plays an important role as a wintering ground for seabirds and forms a critical part of the Isle of Wight Area of Outstanding Natural Beauty (AONB) and the Hamstead Heritage Coast.

Waste water from Calbourne Water Mill includes discharges from one of the oldest working mills in the UK, a restaurant, function facilities and tourism in addition to residential properties. It is also subjected to sudden high peak seasonal

flows. The effluent quality is a consistent 10 mg/l BOD, 15 mg/l SS, 1 mg/l NH3-N

The Solution: Bio-Bubble Advanced Aeration

Bio-Bubble Advanced Aeration waste water treatment has previously and very successfully been applied to various sensitive discharge applications throughout the UK. It is highly effective at processing waste water flows to extremely high standards, meeting compliance with the most stringent Environment Agency prerequisites for effluent quality within environmentally sensitive locations.

Moreover, it is capable of doing this with outstanding reliability using far lower energy input than other systems and has previously demonstrated exceptional qualities of absorbing high shock loads following long periods of low inflow without failure concerns such as that experienced within tourism areas and hotels.