

OFF GRID CASE STUDY

**PUBLIC TOILETS
DUCKPOOL, CORNWALL**



CASE FACTS...

- **REMOTE CORNISH BEACH LOCATION**
- **MAINS WATER NOT AVAILABLE**
- **MAINS ELECTRICITY NOT AVAILABLE**
- **STREAM 200 METRES FROM FACILITY**
- **ORIGINALLY USED OLD CAST IRON RAM PUMP WHICH WAS NOISY AND COSTLY TO MAINTAIN**

Papa Pump Running Costs **£20** per year

Papa Pumps can deliver water over large distances and to impressive heights without using any electricity or fuel.

It is the perfect ecological and off-grid water pumping system.

Papa Pump®




A Green
UK Design
PATENTED

the pump that uses no fuel!

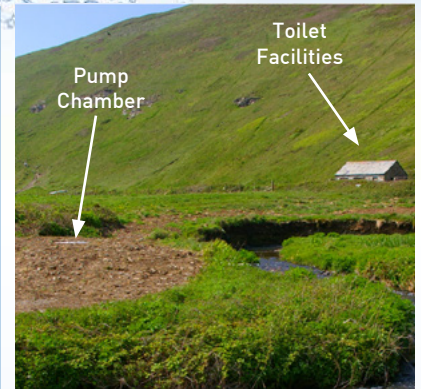
**AN IDEAL SOLUTION FOR
REMOTE PUBLIC
SANITATION FACILITIES**

The Zero Energy Papa Pump system is ideal for us at Duckpool because it's an off grid solution in an area with no mains water or electricity. The pump uses a simple but clever system of using the stream's own water to pump water into header tanks for use in the toilets. It runs 24/7 and only needs minimum maintenance and checking which is very useful in this remote location. When the National Trust inherited the toilets the existing pump struggled to cope with a changing river bed and variable flows. The new pump was installed in a new location in 2014 and has been running ever since and has enabled the toilets to be kept open for future use.

Jeff Cherrington, National Trust Head Ranger, North Cornwall (Boscastle to Morwenstow)



Jeff Cherrington from the National Trust with WPT Technical Director, Phil Selwyn during a routine pump maintenance inspection at the Duckpool site.



unobtrusive and quiet installation

THE PROBLEM

Water was required to provide the remote sanitation site with toilet flushing and washing facilities owned by the National Trust in an area of outstanding natural beauty.

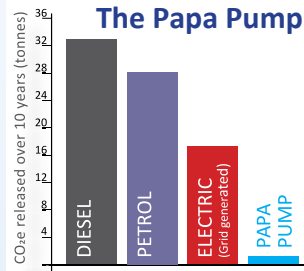
The existing cast-iron ram pump was noisy and expensive to maintain. A water and/or electricity mains connection would have been very expensive to install in this remote part of the North Cornwall coast.

THE SOLUTION

20 years ago Water Powered Technologies put in a single Papa Pump which was upgraded to a 2 pump system 5 years ago. The water delivery problem was solved, **saving time and money on maintenance costs.**

The Papa Pumps deliver free water from a nearby stream, providing water to top up the storage tank inside the sanitation facility. In the summer holiday makers use the toilets and washing facilities without any cost to the National Trust other than a few replacement seals every few years and the occasional check of filters.

The Papa Pump - The Green Alternative



CO₂ Emissions

Using Papa Pumps will not only save you money, it also helps save the environment.

These results show the estimated amount of CO₂ emissions generated by pumping 20m³ a day to a height of one hundred metres, over a ten year period.

Water Powered Technologies is happy to work with the National Trust in offering an energy and mains water saving service for local people and holiday makers.