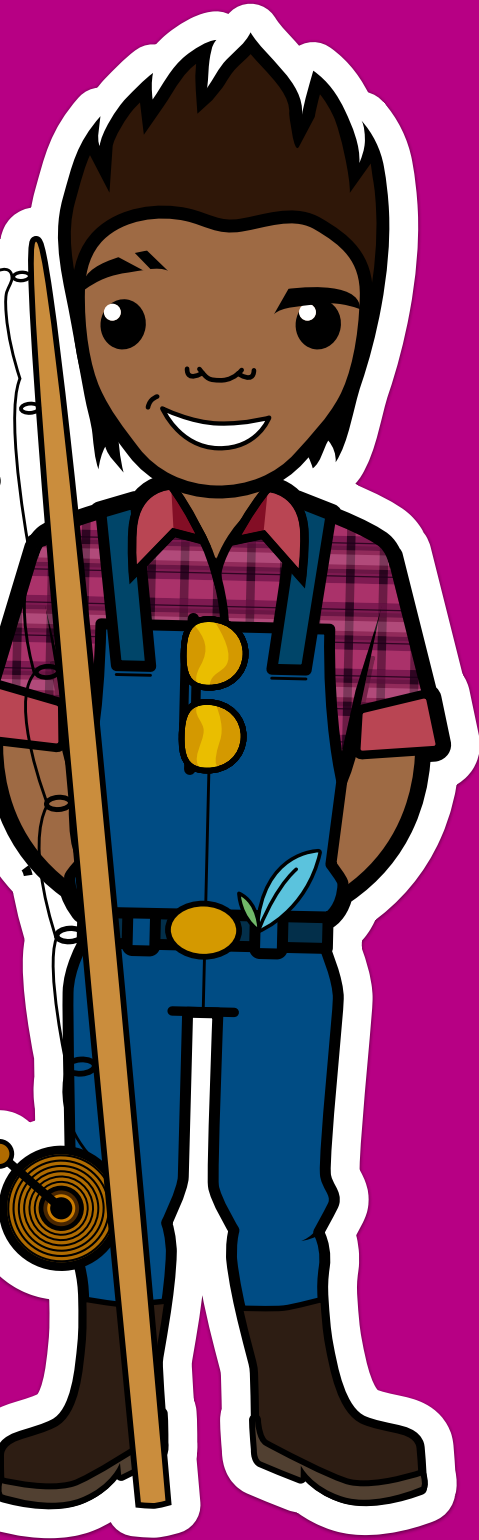


D'rain Water Collection System



An innovative solution to encourage the school to maximise the use of natural water sources, saving both the environment and money in the future.



The problem

The school is being rebuilt from now until 2011 and the water-saving ideas tackled issues around the substantial water needs of new outdoor garden areas.

Average rainfall in Sheerness is nearly 80 cm and flooding is commonplace. When the team visited the local water treatment plant, they learned that it is at its maximum capacity trying to deal with high volumes of water when the drains are overflowing. Clear designs decided to find a solution to capture some of the rainfall to ensure not all water escapes down the drains.



Our process

Following a site visit to Southern Water Treatment Plant in Queenborough, students spent time to discover and learn more about water, defining and investigating water waste within the school and working with a designer to develop their design brief and ideas.

Students split into sub groups to ensure they covered all aspects of the challenge, including marketing and promotion routes and documentation of their Challenge journey.



Our solution

A modular ground water collection system, built using recycled materials such as plastic chairs from the old school, is designed to cut water waste and help meet the new school's water needs.

Square D'rain blocks incorporating the drainage pipes can easily be joined together to create different shapes and sizes.

The collected water is stored in grey water holding tanks and pumped across the grounds when required to water the school gardens and flush the toilets.

