



Water is essential for life, and only fresh water will do. One of the first design considerations is how your plants will get the right amount of water in your garden.

Consider how nature does the things we do when we garden, here are a few examples

| Gardeners | Natures equivalent |
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| Gardeners dig to aerate and improve drainage | Moles, earthworms, woodlice and many other creatures create drainage channels as they burrow which help rain infiltrate to deeper soil layers. |
| Mulching to stop weeds and retain moisture in the soil | Dead plants fall to the soil surface, such as leaves in the autumn and stop light from reaching weed seedlings. It also insulates the soil and retains moisture. |
| Digging in organic matter | Organic material helps retain moisture, creatures like earthworms will drag dead leaves into their burrows. |
| Choosing the right plant for the right place, so that it will be happy and grow well | Plants only grow well in the environments where they evolved, e.g. cactus like hot dry deserts whereas mangroves are happy in estuaries, they certainly wouldn't swop places. |

Where can you find the most sustainable source of water?

We know we all need to aim for net zero carbon emissions. That essentially means not using energy if we can avoid it and making sure that any resources we use are recycled safely. So, think about where your water comes from and how it returns to the environment. Your garden is a small part of the water cycle in action.

How do I move the water, it's really heavy?

One litre of water weighs one kilogramme. On average, each of us use 143 litres of mains water every day. We can cut our carbon emissions if we use less mains water. Think about how you might use gravity, it's a force that's always available, and a free and sustainable way of moving water.

How can I plan a beautiful feature that catches rain and allows me to reuse it?

Ponds and fountains are lovely features to have in a garden, but can they be more than just an ornamental feature? Could they be used to collect, store and re-use water. Check out sustainable drainage systems, also known as SuDS. These systems make sure your surface water runoff doesn't become your neighbour's problem when you design your new garden and they help water return to the water cycle naturally.

What will happen if we get a flood or drought?

Climate projections are saying we could see more frequent and longer dry spells and heavy less frequent rainfall in the UK, so we need to care of what we have, we might need it in the future.

