



Water on the move:
Slow the **flow**

The text is presented in a white, rounded rectangular box. The word 'Slow' is in yellow with a yellow underline, and 'flow' is in blue with a blue underline. The word 'the' is in black. Above the text is a grey cloud icon with two blue raindrops. Below the text is a yellow arrow pointing towards the bottom left, and several blue water drop icons of varying sizes are scattered around the box.

Overview
presentation

Learning outcomes

Pupils will:

- Know that flooding is more likely due to climate change and that urbanisation adds to flood risk
- Understand that Sustainable Drainage Systems (SuDS) slow and direct water to reduce flooding and improve spaces for people and wildlife
- Know that it's vital to keep our sewers clear and there are actions we can all take to help this.



Key Vocabulary:

The water cycle, evaporation, condensation, precipitation, transpiration and percolation, climate change, extreme weather, urbanisation.

Water Recycling Centre, combined sewer, foul sewer, surface water sewer.

Sustainable Drainage Systems (SuDS), permeable surface, green roof, water butt, tree pit, rill, swale, rain garden, wetland.

Where does our water come from?

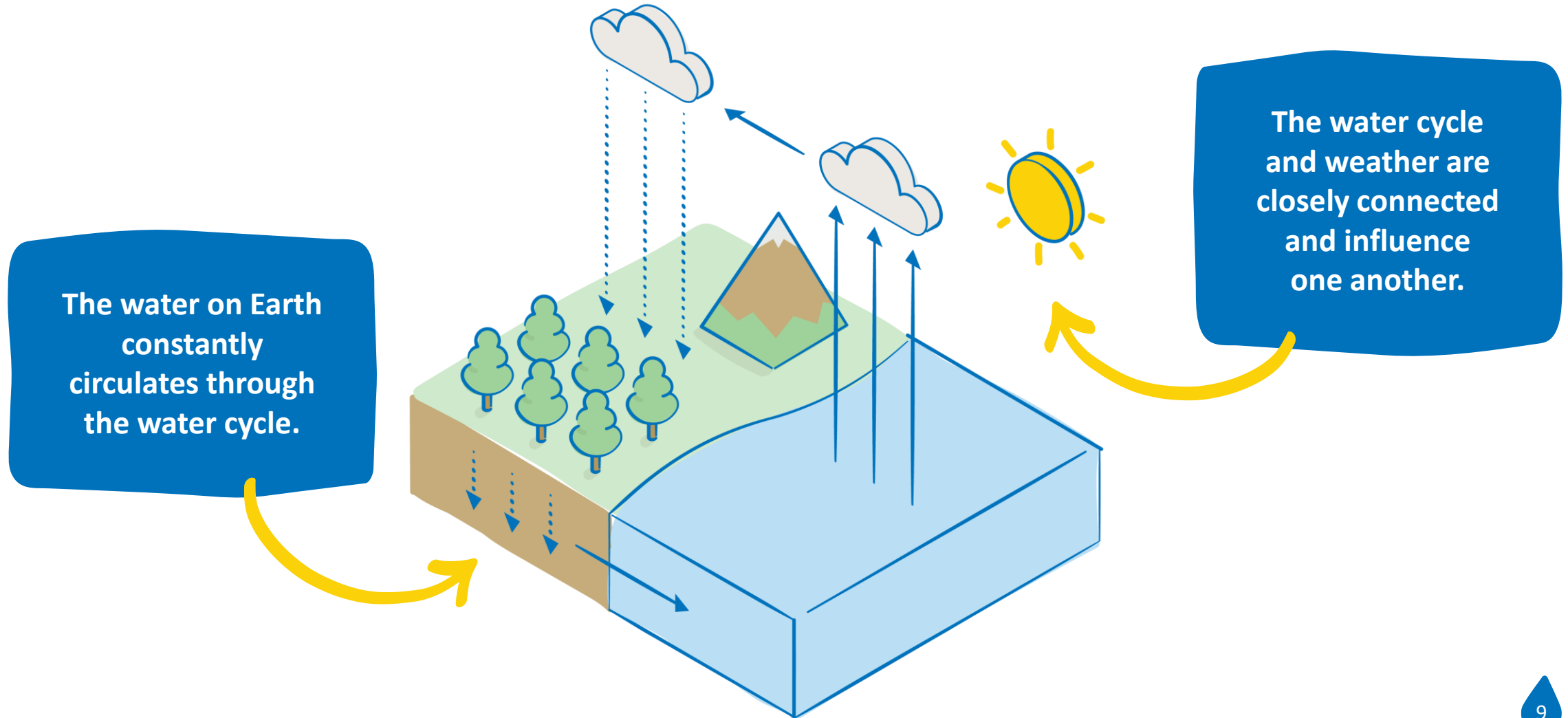


**...and where
does it go?**

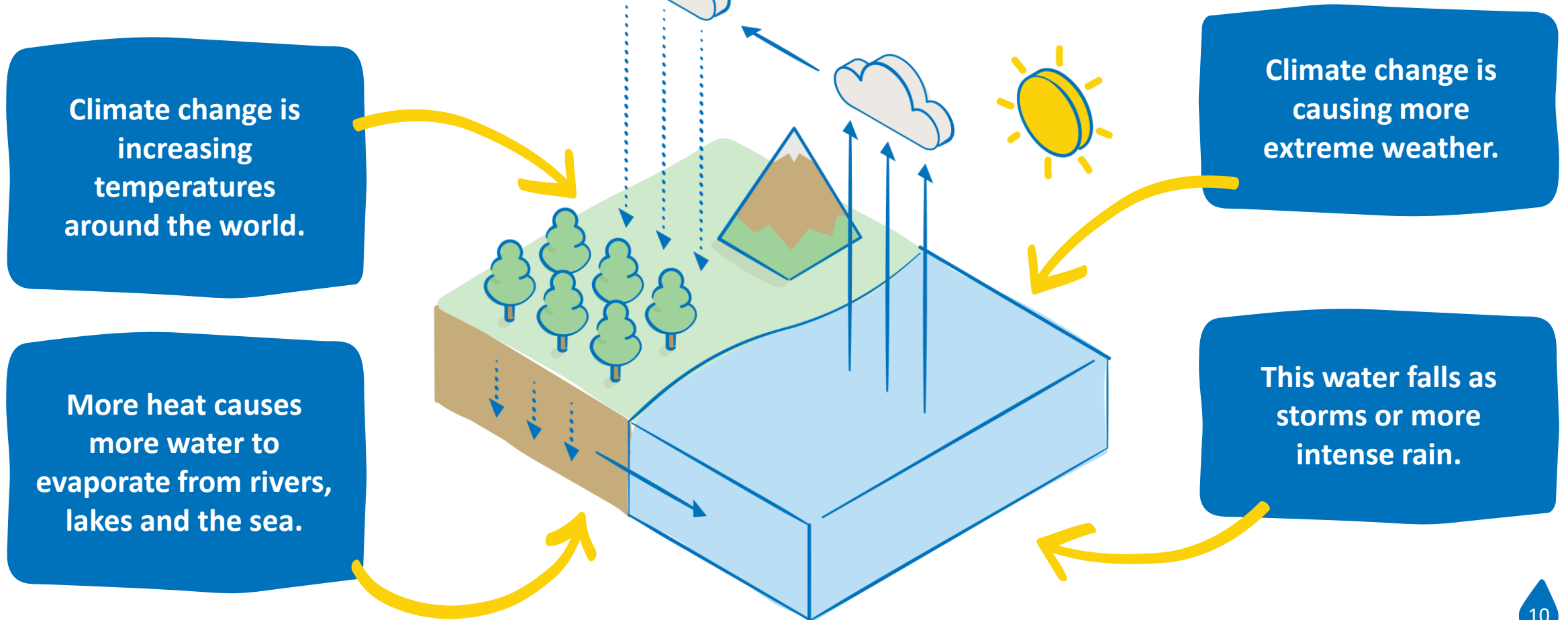
Watch the video



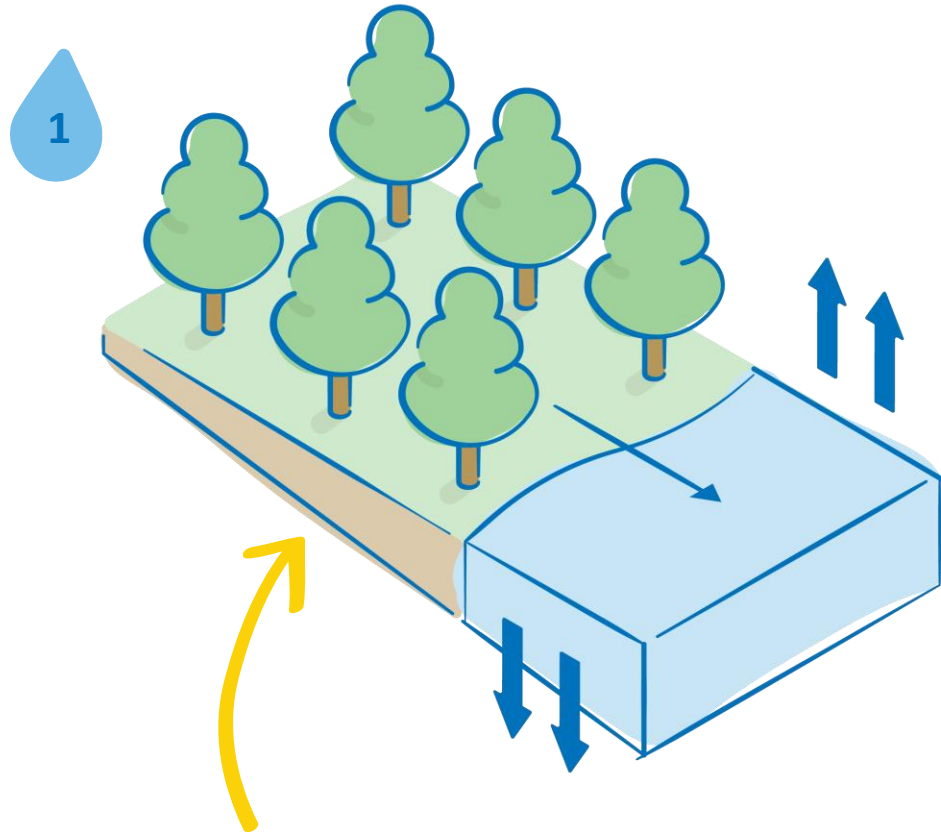
Water is always on the move



Climate change is causing more extreme weather

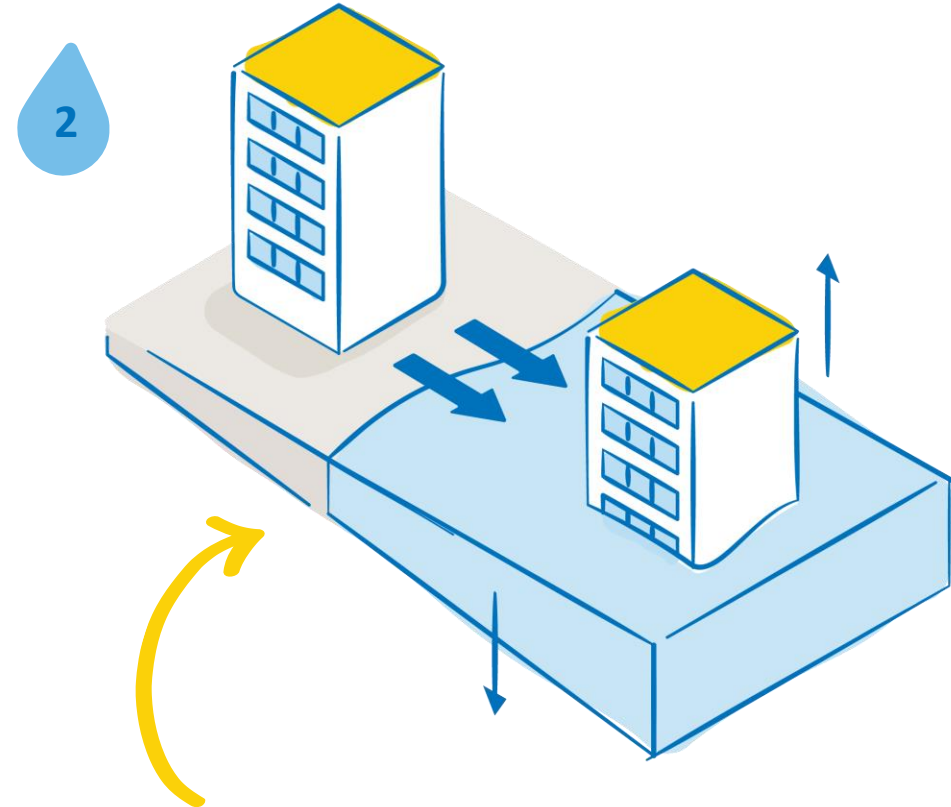


Urbanisation changes how water flows



Water can soak and flow away naturally.

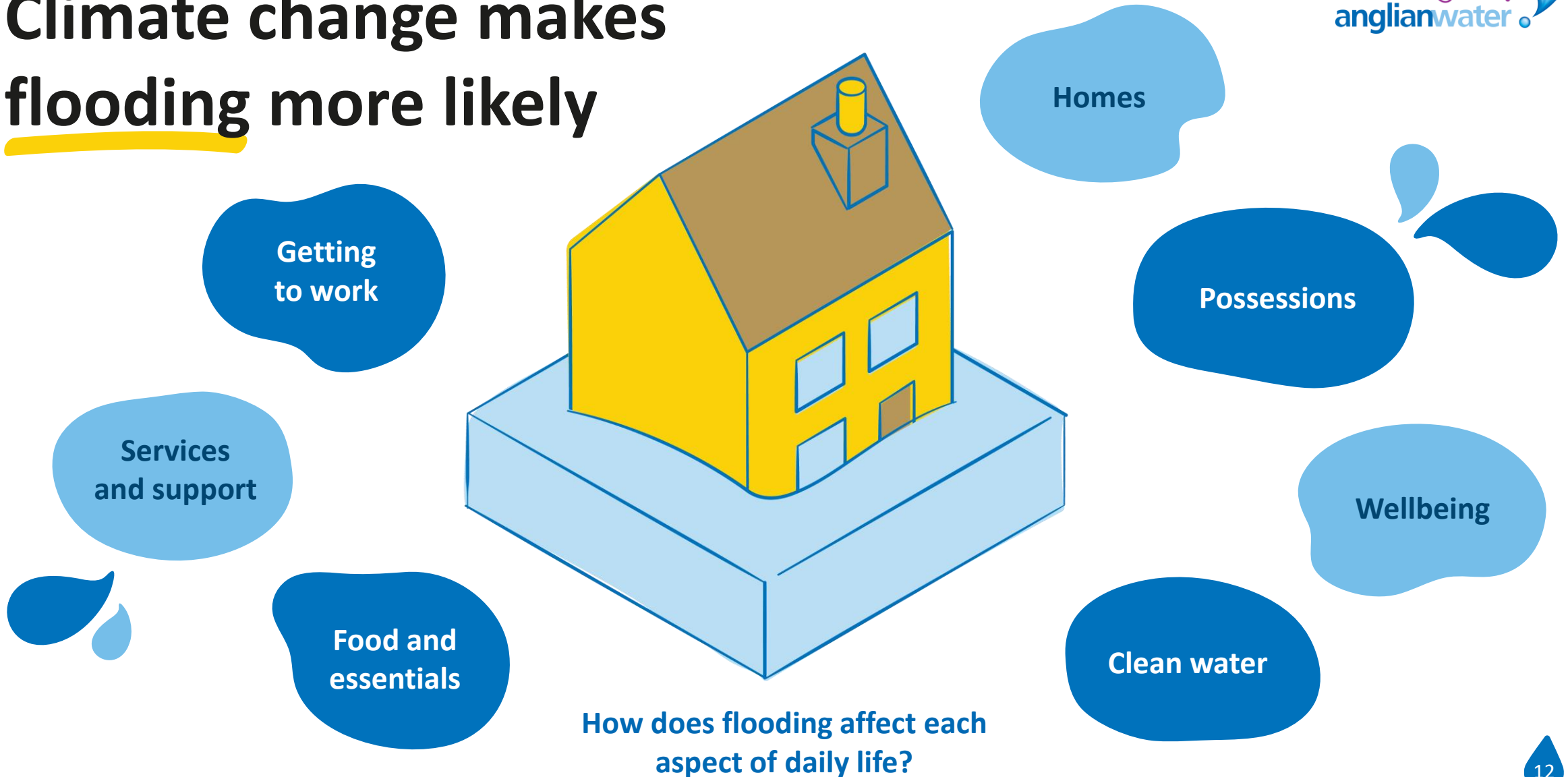
Flooding is rare.



Water can't soak or flow away naturally.

Flooding is more likely.

Climate change makes flooding more likely

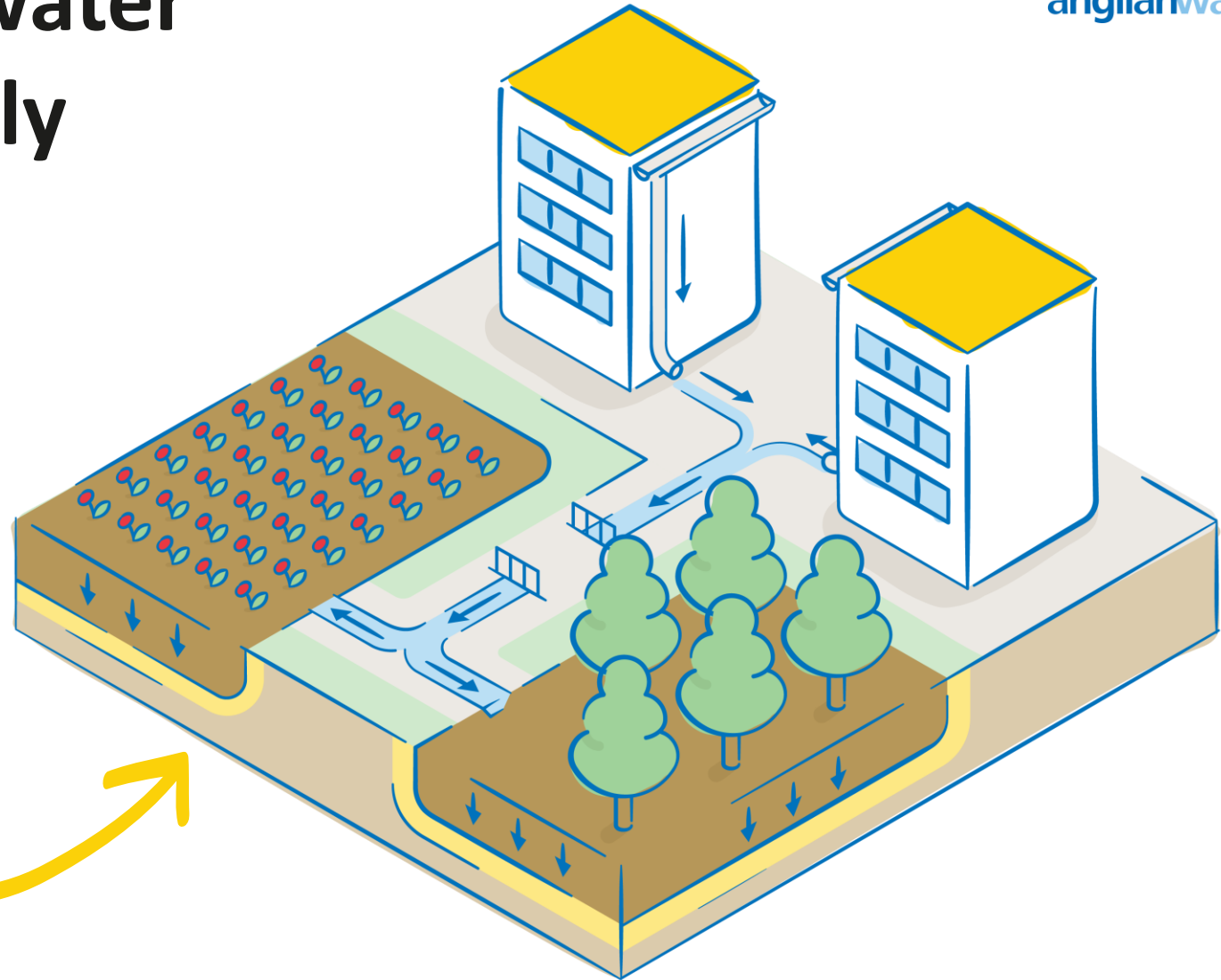


We need to help water flow more naturally

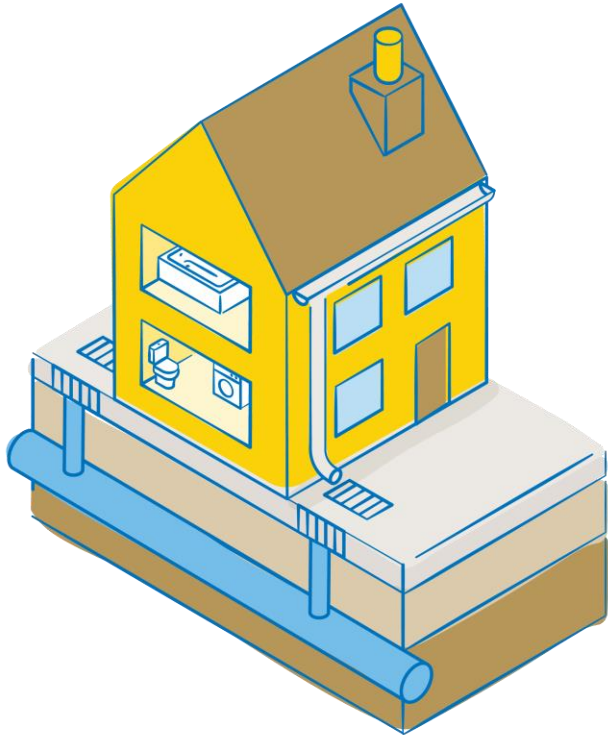
We can't get rid of our built environments - they are where we live and work.

Climate change means even more rural environments may flood more often.

How can we change them to help water flow more naturally?

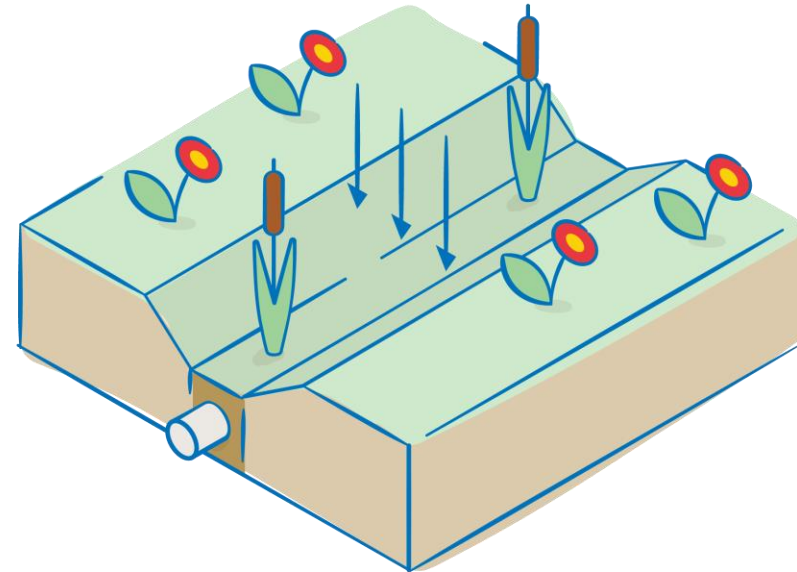


Sustainable Drainage Systems (SuDS) help water flow more naturally



Sewers **remove the water** that can't soak into the ground through concrete and paving in urban places.

Storms can overwhelm our sewers and cause local floods.



SuDS work more like nature by **reducing or slowing the flow of water** so sewers and rivers aren't overwhelmed.

SuDS help to **prevent flooding**.

How SuDS work

Store

+

Soak

+

Move

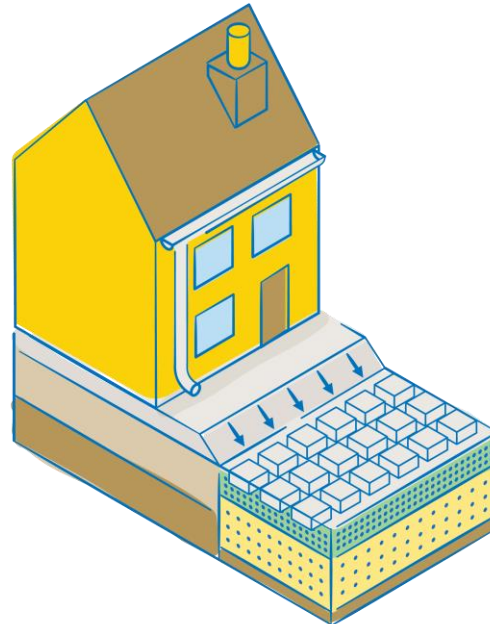
+

Contain

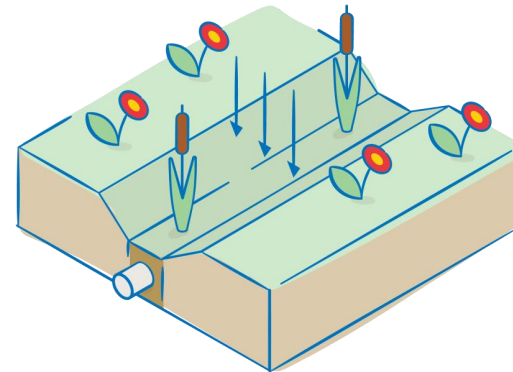
Capture water to use in the future, like runoff from roofs.



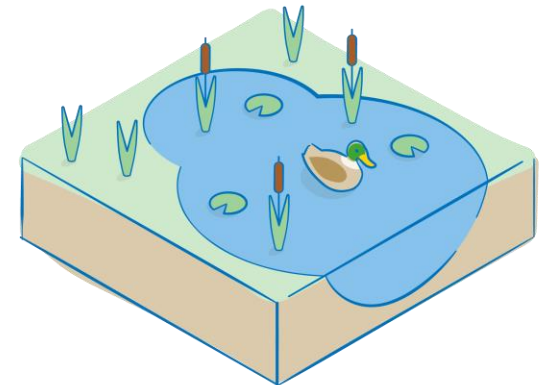
Permeable surfaces let more water soak into the ground.



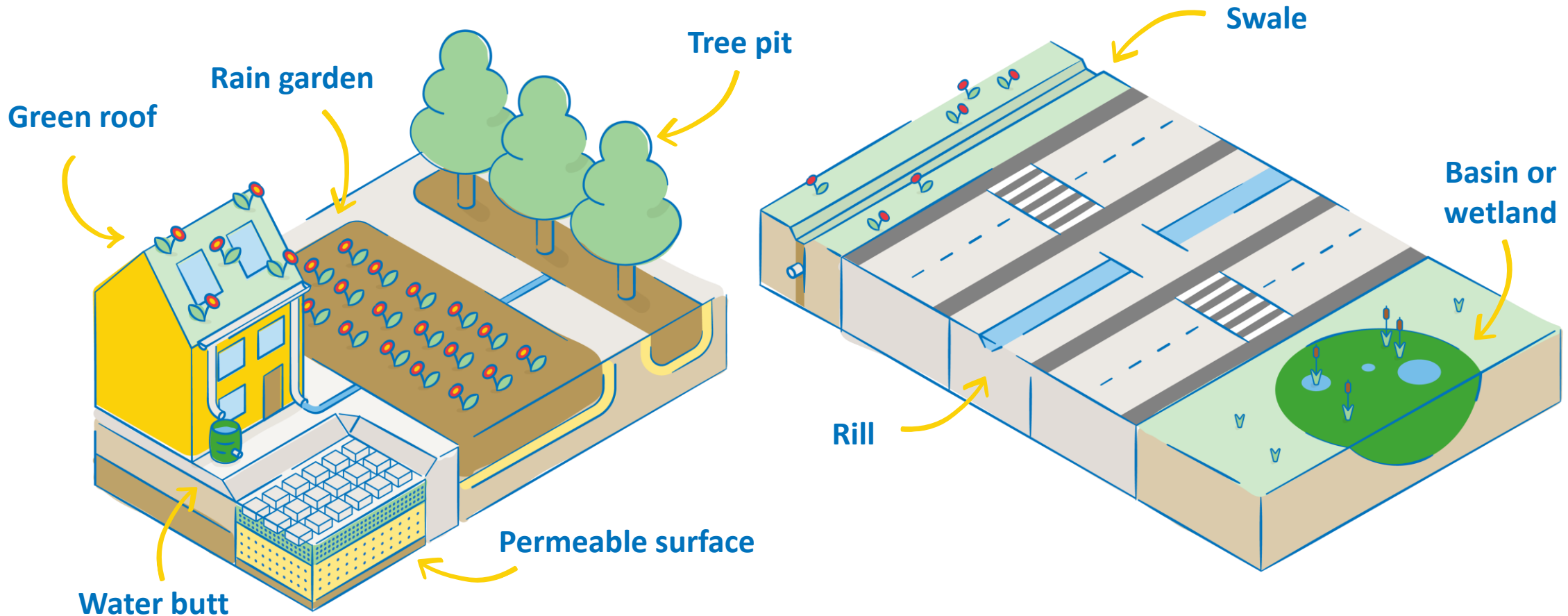
Use nature-inspired channels to move water away.



Ponds and wetlands fill with water, slowing how it enters rivers and lakes.



What do SuDS techniques look like?



Store > **Soak** > **Move** > **Contain**

Why are SuDS such a good idea?

More water can soak naturally into the ground, so flooding is less likely. More water is also stored to use in the future.

Lower water quantity

Less flooding means less waste and pollution will be carried into the natural environment.

Water in SuDS is filtered naturally.

Higher water quality

Better for people

SuDS create natural spaces in urban environments which are good for people and nature.

SuDS also reduce carbon emissions as less rainwater is pumped to and cleaned at Water Recycling Centers.

Better for nature

Sewers are less likely to be overwhelmed, reducing local flood risk.

We can all do our bit to help water flow

Foul water sewers

Take used water from homes, farms and industry to Water Recycling Centres.

If these sewers become blocked, this water cannot flow back to be cleaned.



Surface water sewers

Take rain water to rivers and the sea.

If we allow waste or litter to enter these sewers this can harm our natural environment.

We can all do our bit to make sure our foul water sewers don't become blocked and that waste or litter doesn't enter surface water sewers.

How can we look after our sewers?

Only put the 3Ps
down the loo:
Pee, Poo and Paper

Always put litter in
a recycling point or
bin, or take it
home with you.

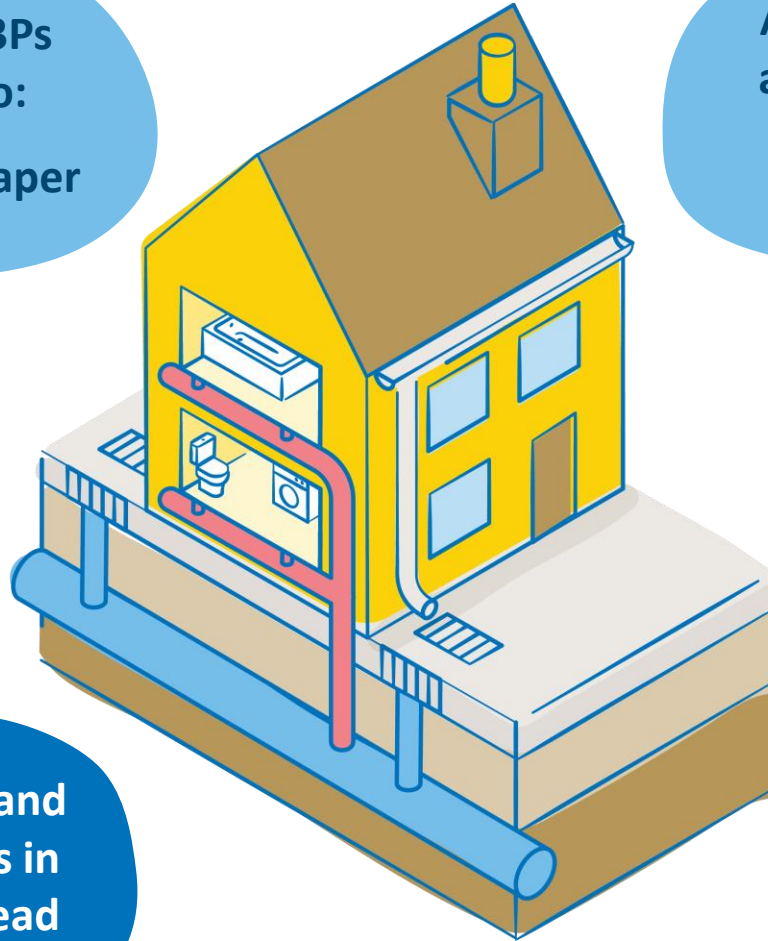
Put wipes, nappies
or sanitary items
in the bin.

Remove hair from
the shower plug and
put it in the bin.

Put fat, oils and
food crumbs in
the bin instead
of the sink.

Keep drains in the
garden or street
clear of leaves,
gravel and soil.

Never pour waste
paint or oil down
into the surface
water sewer.

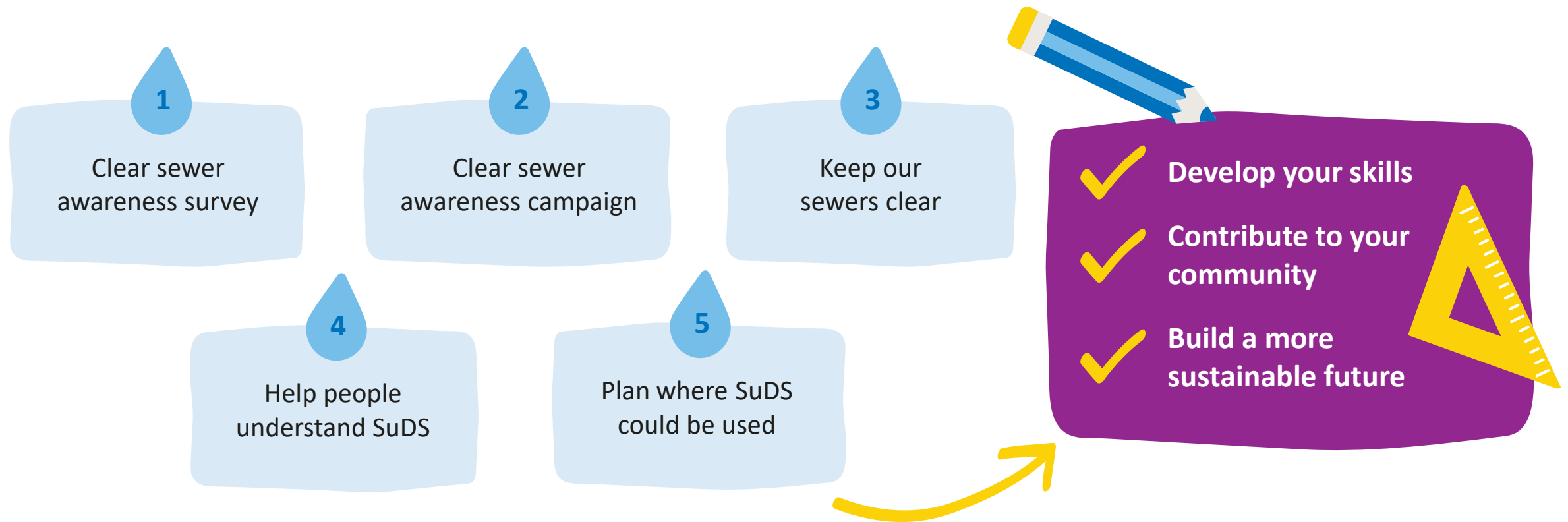


SuDS and sewers work together



Take the Community Action Challenge!

Take our Community Action Challenge and help everyone to love every drop!



Take the Design Challenge!

SuDS might make a difference in your local community - could you help to design how?

