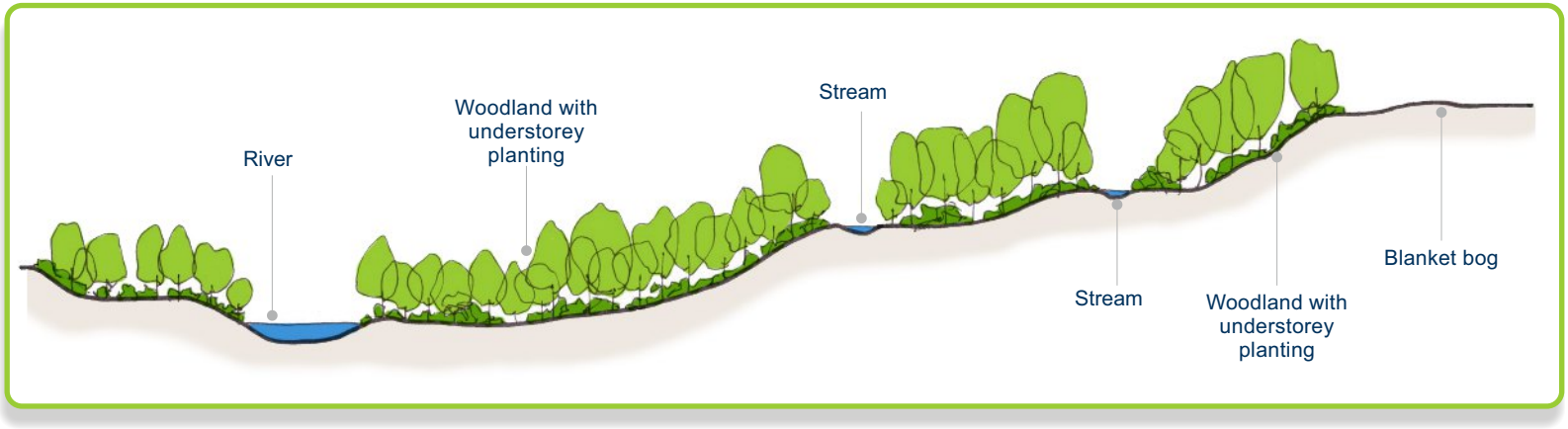
# Slow The Flow: You Can! - general principles of urban SuDS (Sustainable Drainage Systems)

If our valley was **Natural**

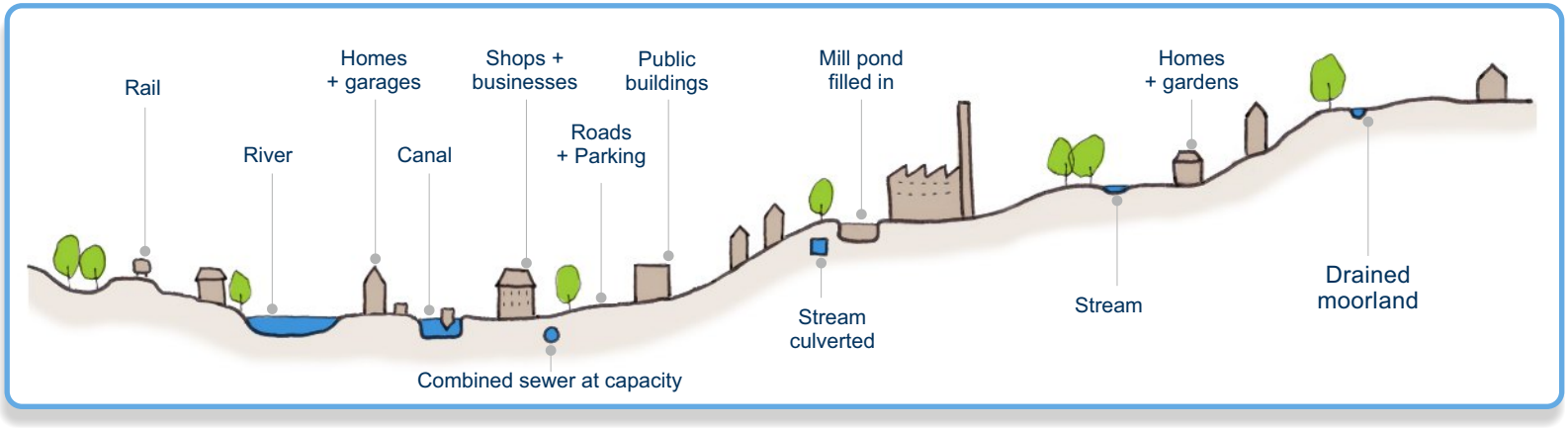
it would maintain a balance of water circulation through the processes of rainfall, evaporation, leaf interception and **absorption by plants**, surface runoff, and **infiltration to free draining ground.**




Due to human **Development**

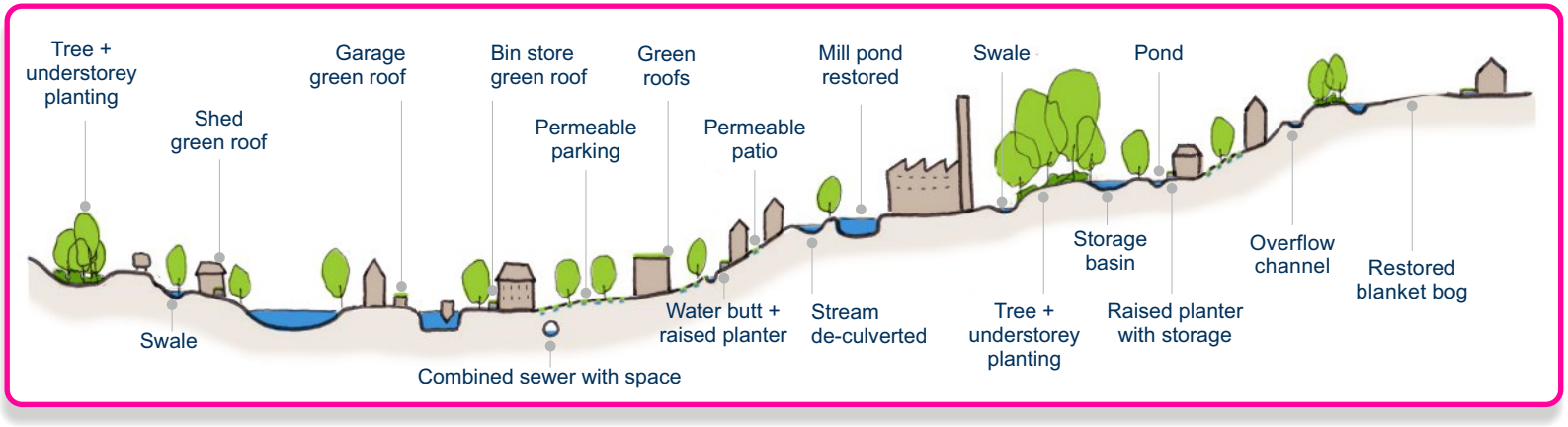
replacing plants and soils with **hard surfaces** such as roofs, roads, patios and car parking, **rainfall runs off much more quickly**, causing surface water and combined sewer flooding, and higher river levels.

**runoff flows are also increased**




Using SuDS to **Slow The Flow**

in our urban areas, as well as upstream, we can **mimic natural water management.** Many small changes can have a big combined effect on **reducing flood water quantity and quality.**




**For more detail on how to Slow The Flow: At Home / At Work / At School / Public Spaces, go to:** ***www.slowtheflow.net/you-can-slow-the-flow***

# Slow The Flow: You Can! - general principles of urban SuDS (Sustainable Drainage Systems)

Think about the space available and where rain water goes - **where are the puddles?**
How does water behave in a storm?

## ‘Soft’ areas (planting, grass, earth):

Can you create surface depressions (swales/basins) that will temporarily store water, and then soak away?

Consider plants that take up moisture, but don’t mind dry spells.

Plant trees! They prevent rain reaching the ground, use water as they grow, and break apart the ground with their roots.

## ‘Hard’ areas (paving, roofs, walls):

Can you break up the surface to allow infiltration? (e.g. replace tarmac with gravel + paved tyre tracks)

Could you construct water storage planters on top of hard areas?

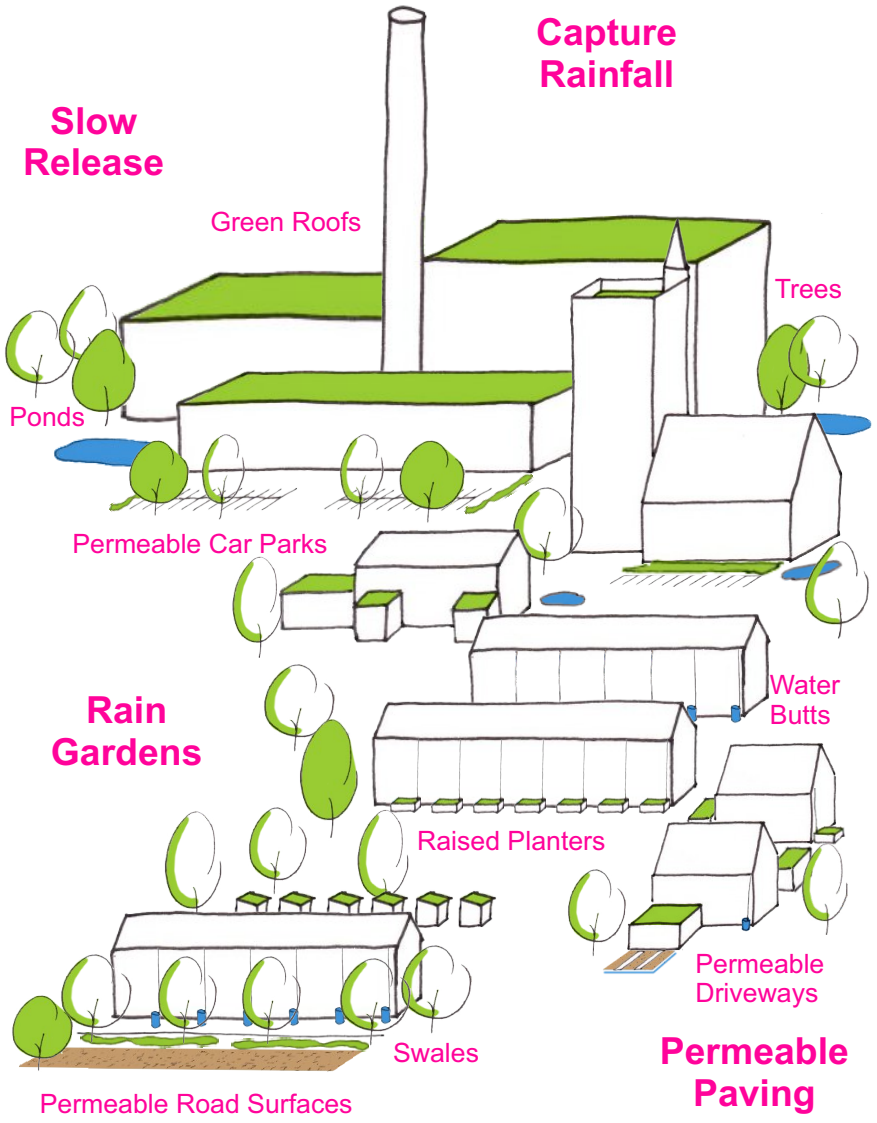
Divert drainpipes, so that instead of going straight into the sewer, the water is temporarily stored / filtered and cleaned, through Slow the Flow methods (known as SuDS elements - see central box)

DIY is OK if changes are small-scale and simple, but get professional advice if you intend to:

- increase the volume at any outfall point
- work very close to a permanent river or stream (≈10m)
- make change to a listed building or in a conservation area
- create a green roof
- re-use grey water in buildings
- do anything that could affect your neighbours

NB. Remember we have a varied geology, i.e. water runs through sand, but if you are working with clay, it may puddle rather than soak in.

## Ways to Slow The Flow




The Calder Valley is great at holistic thinking. SuDS can also benefit **water quality, wildlife, health** and **attractiveness.**

Slow The Flow combines well with other **Green Infrastructure**: local resources include *Incredible Edible*, *TOUCH* (biodiversity for wildlife), & *Treesponsibility*

## Quick Wins

Sign up to receive *Environment Agency Flood Warnings* (even if you’re not in a flood zone)

Make *water butts* into ‘mini leaky dams’ in winter! Leave the tap open slightly.

**Be a Water Hoarder!**

Help to prevent combined sewer overflows by altering your actions during flood events to discharge less water into drains (as you might in drought - e.g. shower rather than bath, wait to use the washing machine...) *Yorkshire Water* provide *tips* and *free water saving packs.*

We hope you are able to be proactive and start right away!

However, you may not have resources to do anything right now. If so, next time you repair or refurbish property, please consider SuDS.

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