SUDS:

The SUDS approach to drainage is flexible, encompassing a wide range of techniques including green roofs, rainwater harvesting, permeable pavements, wetlands and ponds. These individual techniques should be used in a management approach that reinforces and, where possible, follows the natural pattern of drainage.

These are:

● Prevention: The use of good site masterplanning, design and housekeeping measures on individual sites to prevent run-off and pollution (e.g. minimising paved areas).

● Source control: Control of run-off at or very near its source (e.g. using rainwater harvesting, pervious pavements, green roofs or soakaways for individual houses).

● Site control: Management of water from several sub-catchments (e.g. routeing water from roofs and car parks through swales to an infiltration basin or wetland serving the site).

● Regional control: Management of run-off from several sites, typically in a detention pond or wetland.

MAINTENANCE CHECKLIST – To be carried out Quarterly

Rainwater Goods and Drains		
Item	**Check points**	**Action points**
Gutters and downpipes	Do the gutters slope correctly? Is the water carried away effectively? Are there any stains on the wall suggesting blocked or damaged sections? Are the fixings secure? Do the gutters and downpipes need to be repainted?	Clear away leaves and debris regularly. Consider fitting bird/leaf guards.
Gulleys	Does the gulley catch all the water from the downpipe? Are gulleys free from leaves and other debris? Does the water flow away effectively after rainfall?	Clean gulleys regularly and remove any silt and debris. Clear any blockages using drain rods. Empty any silt traps every three months.
Ground gutters	Is the pointing between the bricks or flags in good condition or does it need to be repaired?	
Surface water drains	Is water satisfactorily carried away from the structure?	Consider installing a water butt to collect rainwater.
Foul and combined drains	Are accessible drains, manholes, inspection chambers and outlets clear and in good condition?	
Soakaways	Does the water drain away quickly after rainfall?	Check for silting or contamination every few months or so. Remove any silt deposits when the soakaway chamber is empty.

What is a water butt?

Water butts collect rain water from downpipes and store it for re-use. They come in a wide variety of sizes, shapes, finishes and colours to suit a wide range of applications.

When might I use a water butt?

Water butts are ideal for collecting run-off from roofs by disconnecting the downpipe from the existing sewer outlet and intercepting the - flows. An over- flow which prevents the water butt from - flooding should be redirected away from the combined sewer to ensure - flows are fully disconnected.

For example, you could connect a perforated hose to the out- flow to allow the water butt to empty after a rain fall event, and make capacity for the next storm.

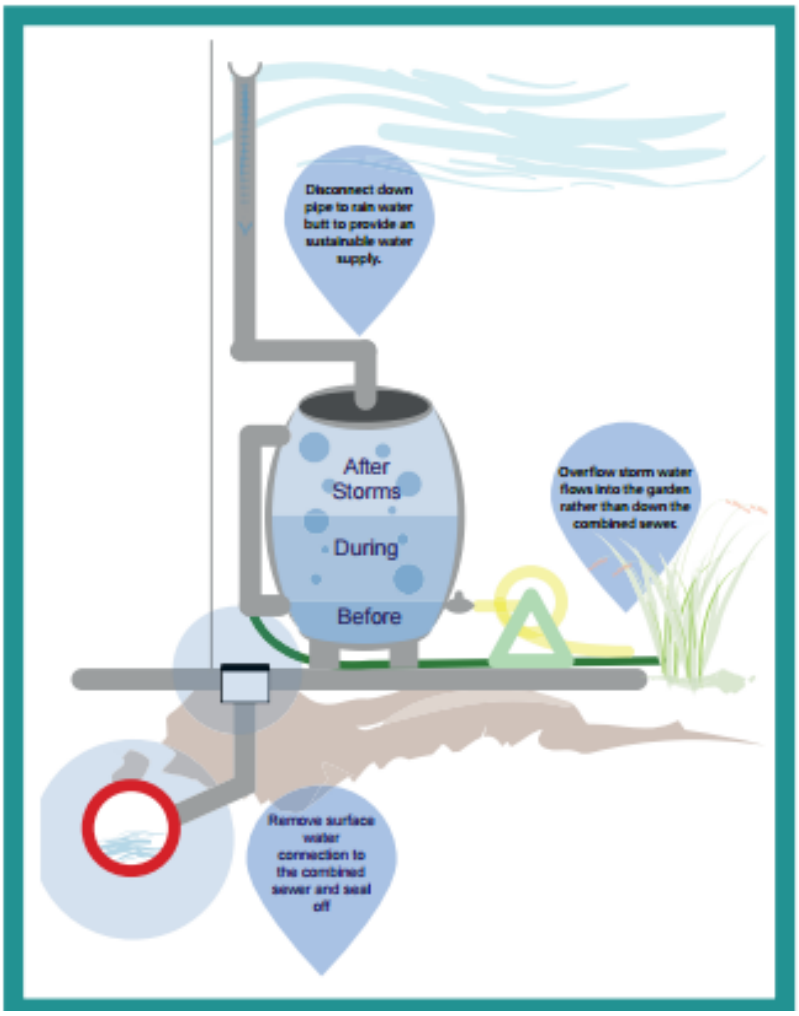
What do I need to consider when planning my water butt?

- The water butt needs to be placed in an area which can take the weight of the water
- You will need an over- flow from the water butt which directs water away from the combined sewer
- Where it is not possible to route the over- flow away from the combined sewer, you should ensure the water butt has a constant out- flow such as an irrigation system so that the water butt does not remain full for long periods
- The larger the available volume within the water butt the more of your roof water it will intercept. You can multiply that by your roof area to see what proportion of the - flow your water butt will retain.
- You may wish to raise the water butt slightly for ease of filling watering cans.

Installing a water butt – SEE DIAGRAM BELOW

- Positioning the butt under the downpipe, raise the base off the ground with a stand or bricks so that you can fit a watering can underneath the tap.
- Mark where the top of the butt comes to on the pipe and take it off the stand.
- Saw through the pipe 3cm below the mark and attach the rainwater diverter to the cut pipe.
- Drill a hole in the butt 8cm from the top to fit the connector.
- Push the connector through the drilled hole and screw in.
- Attach the connector to the diverter with the fitting.
- Put on lid and secure it.

Cover your water butt carefully to stop leaves and other debris falling in; this will help to prevent algae forming. If you do get slime or scum on the surface, you can buy a biological rainwater treatment to get rid of it. If you children use your garden, make sure the lid of the butt is secure and not accessible.


Disconnect down pipe to rain water butt to provide an sustainable water supply.
After Storms
During
Before
Overflow storm water flows into the garden rather than down the combined sewer.
Remove surface water connection to the combined sewer and seal off