

URBAN WATER

Too much water

Incidental heavy downpour leads to local flooding

Too little water

Long drought periods in between rain events results in wilting urban green

Too hot

Lack of urban green and shadow leads to heat islands

Space constraints

Above and below ground, space to manage water is limited

Sustainability

Use natural materials and solutions to restore the urban water balance

New environmental challenges require the EU to modernise its water legislation and tackle all sources of urban floods, including storm overflows, through water retention measures.

LEGISLATION

THE WATER FRAMEWORK DIRECTIVE

aims to ensure good quality of groundwater and surface water bodies. National and local authorities have to limit and prevent pollution at the source.

THE FLOOD DIRECTIVE

imposes on Member States and local authorities to prevent and mitigate adverse effects from floods, and encourages water retention measures.

THE URBAN WASTE WATER TREATMENT DIRECTIVE

aims to limit pollution related to waste water discharges. Authorities should maintain sewerage systems and manage rainwater run-off.

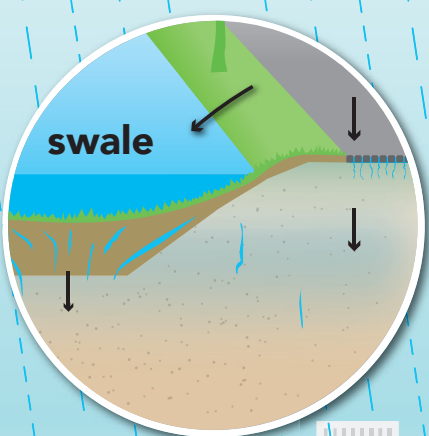
At national and local level.

CLIMATE SOLUTIONS:

SUSTAINABLE URBAN DRAINAGE SOLUTIONS

NATURE BASED SOLUTIONS

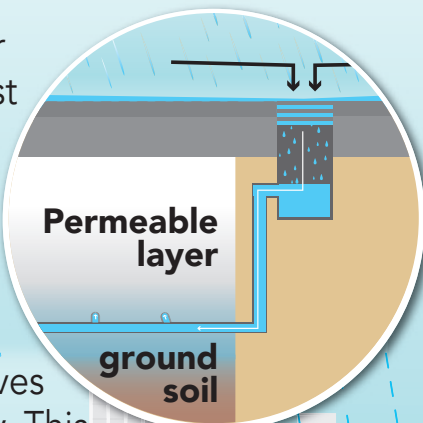
Swales collect, absorb and infiltrate rainwater from streets and houses.



Porous sidewalks allow water to pass through into the ground.

BUFFER SOLUTIONS

The water moves fast into the buffer...



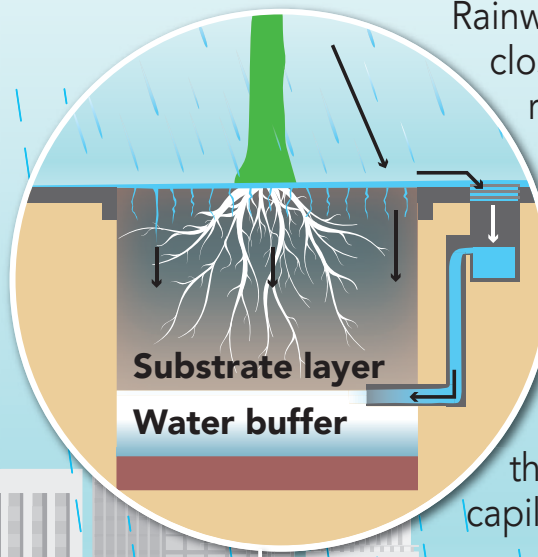
...but moves out slowly. This delay prevents peaks and thereby storm overflows.

Rain goes into the drainage

Delayed discharge

URBAN GREEN SOLUTIONS

Rainwater is kept close to the root system

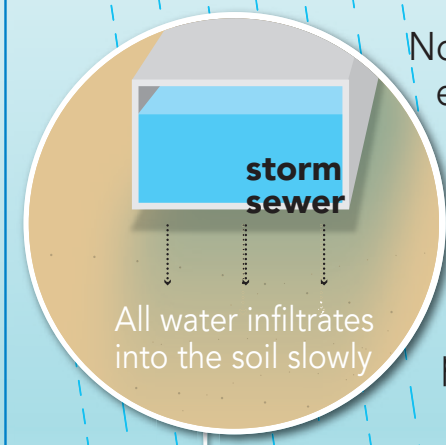


The water rises up to the roots through capillary action

Evaporation and shade from trees prevent heat islands

INFILTRATION SEWER

The sewer system is separate from the stormwater system



No rainwater enters the sewer system and overruns are prevented.

Rainwater goes into the rectangular storm sewer.

Wastewater goes into the sewer.