



# **Urban Tree Design for a Sustainable Climate**

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**SuDS tree pits**

# why trees?

“Imagine if trees gave off WiFi signals,  
we would be planting so many trees  
and we'd probably save the planet too.  
Too bad they only produce the oxygen  
we breathe...”



# The value of trees



Living near green urban areas improves physical and mental health.



Strategically placing trees in cities can cool the air by up to 12 degrees.



Trees capture rainwater and reduce runoff, which helps prevent soil erosion and flooding.



A large, mature tree can absorb 150 kg of CO<sub>2</sub> per year under optimal conditions.



Many trees produce fruits, nuts, and seeds that serve as a source of food for humans and animals.



Trees reduce noise pollution in urban environments.



Trees play a crucial role in enhancing biodiversity.



Trees are excellent filters for urban pollutants and particulate matter.



Trees save energy in the built environment.



Trees increase property values and make urban areas more attractive.









Damaging

Detrimental

Costly





# TREEPARKER

# TreeParker

Urban Tree Planting & Water Management Cell System

Dimensions: 605mm x 605mm x  
400 / 600 / 800 / 1000 / 1200 / 1500mm





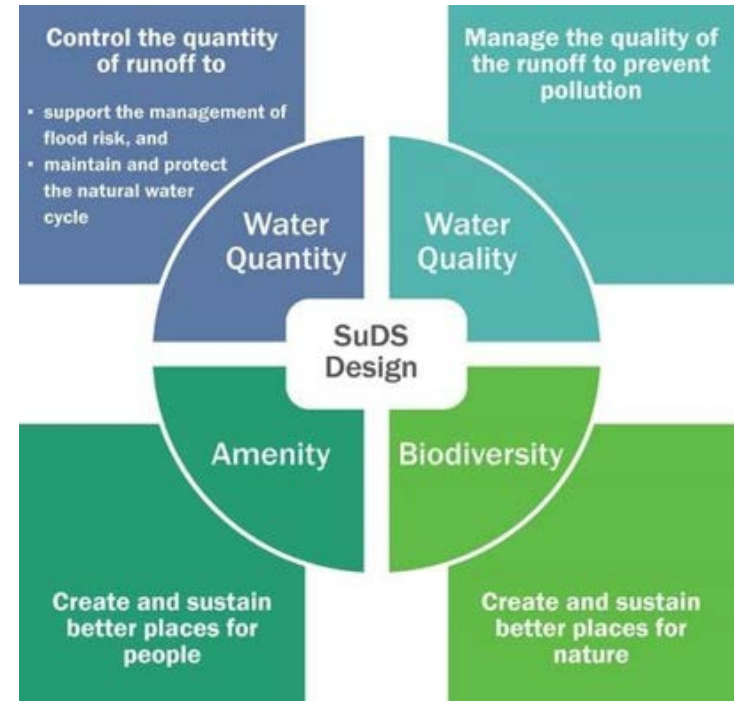
# TreeParker Recycled **100%**



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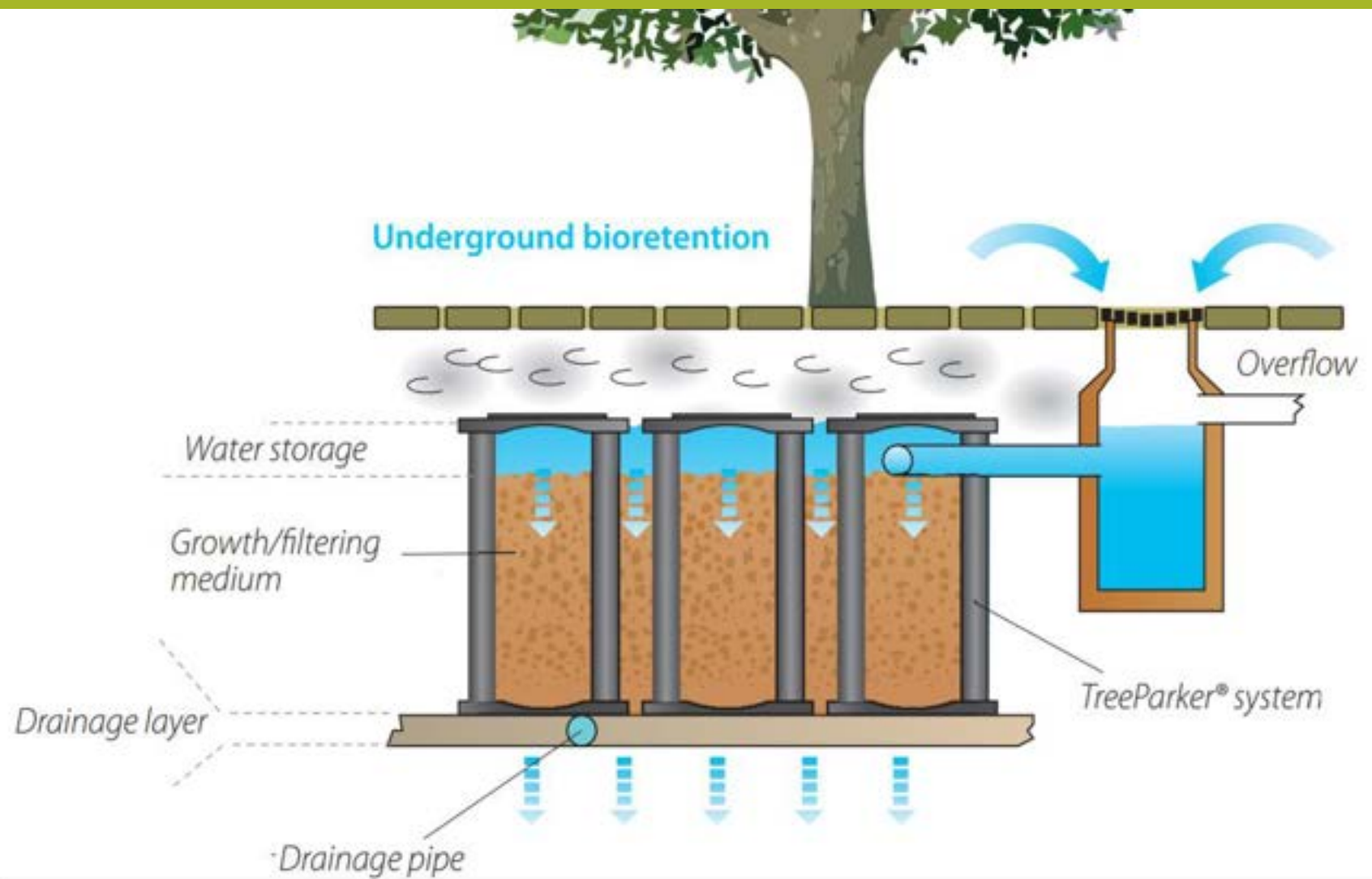


# SUDS & CIRCULAR ECONOMY









# TREEPARKER WATER MANAGEMENT

# SuDS Tree Pits

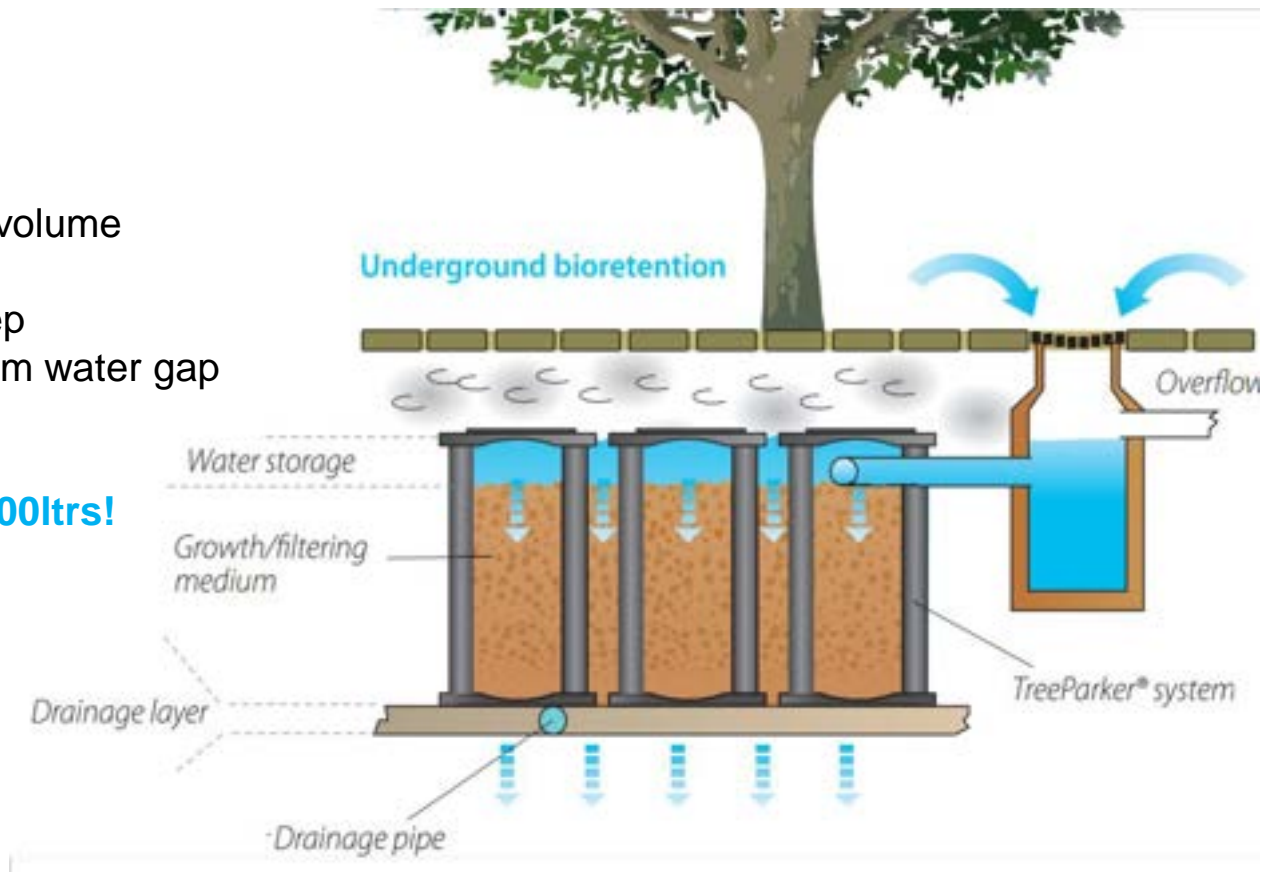
1 medium tree = 14m<sup>3</sup> soil volume

4.8m x 4.8m @ 800mm deep

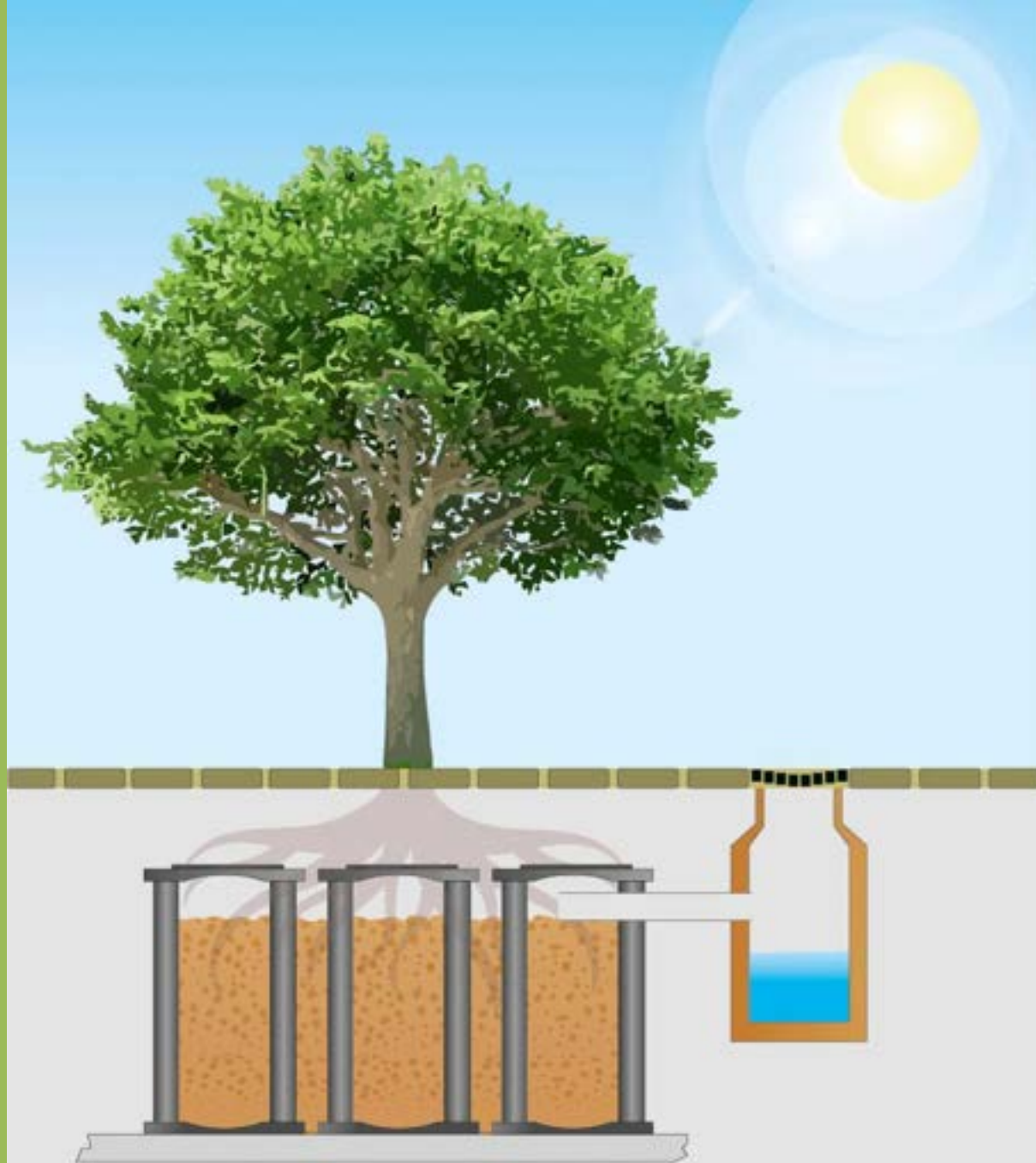
600mm soil volume + 200mm water gap

= 4.6m<sup>3</sup> water storage/4,600ltrs!

+ 240 Overflows!

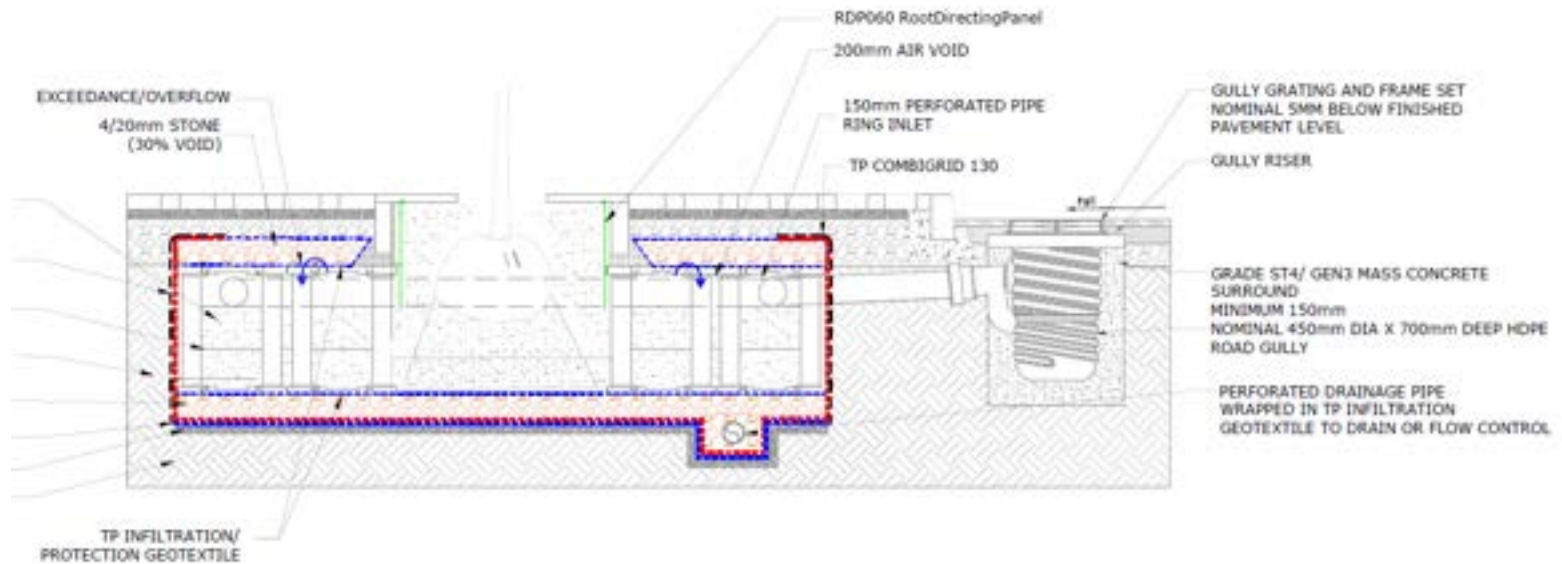












**SK2 - TREEPARKER SUDS TREEPIT**  
**700mm DEEP TREEPARKER SYSTEM WITH 200mm AIRGAP**  
**AND 150mm CLEAN STONE TOP AND BASE**

### Combine the elements

30% type 3 build up + 200mm void + 25% soil + 30% drainage layer = **23m<sup>3</sup>!**

**Water quantity** – ability to attenuate water within the system, reducing flood risk etc

**Water quality** – natural filtration of pollutants through soil media

Water  
Quantity

Water  
Quality

SuDS  
Design

Amenity

Biodiversity

**Amenity** – providing shade, green spaces and wellbeing for people/communities

**Biodiversity** – habit for birds and animals, pollinators etc













# Any questions?

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