

Tree Roots and sewer pipes: a growing concern

Western Water is always working to prevent sewage spills that can affect our environment and waterways, and may pose a public health problem.

Most sewer blockages and spills are caused by tree roots finding their way into our sewer pipes.

Trees are essential to our lifestyle and environment, providing shade, beauty and habitat for our wildlife.

But what's happening underground can be a different story. Some trees and plants have vigorous root systems that can cause sewer blockages and overflows if they have been planted too close to sewer and storm water pipes.

How tree roots can block pipes

A tree's root system will seek out the nutrients and water needed for its survival. If there is a tiny fracture or gap in your sewer or stormwater pipe (at the pipe join or caused by ground movement), fine hair-like roots can penetrate the cracks looking for moisture.

Once inside, these tiny roots can grow into a mass, blocking and damaging the pipes and causing messy sewage spills.

Who is responsible for repairing damaged pipes?

If roots have blocked or damaged sewer pipes on your property, you are responsible for any repairs. A licensed



plumber can clear pipes, and give you advice on the best way to stop the problem recurring.

This may involve repairing pipes, and/or removing the tree. Tree roots that have entered sewer pipes once are likely to do so again. Cutting back roots can actually encourage them to grow, in the same way that pruning a tree encourages it to grow back.

What can I do to avoid pipe damage?

The best way is to prevent tree roots from getting into the sewer and stormwater in the first place.

If you are planning on planting a tree:

First, find out where the sewer pipes are located on your property. Contact Western Water's property service team on 9218 5560 or go to our website to apply online for a property sewer plan. A small fee applies.

Then choose your tree carefully. Ask your local nursery for advice on the root structure and habits of the trees you are considering. Plants and trees indigenous to your area are often a good choice, as they are adapted to local conditions.

Finally, choose your planting site, avoiding areas on or close to sewer pipes. Lists of suitable trees and planting distance from sewer pipes are overleaf.

What happens when a sewer overflows?

When a sewer pipe becomes blocked, sewage backs up and can overflow. If the blockage is on your property this can mean sewage overflowing into your toilet, bathroom or laundry. Other spills can flow into waterways, parks or onto footpaths.



Trees to plant near sewer pipes

It is a good idea to get professional advice on garden design where possible. As a general rule, tree roots extend about 1.5 times the length of the tree's branches. The following lists nominate suitable tree species, which should be planted at least 2-4m away from a sewer pipe.

Please be aware that these lists are provided as a guide only. For further information, please contact your local nursery.

Plant no closer than 2 metres to a sewer pipe:

- Box-leaved Wattle (*Acacia buxifolia*)
- Kurrajong (*Brachycton populneus*)
- Evergreen Spindle Tree (*Euonymus Japonica*)
- Flowering Crabapples (*Malus species*)
- Blackwood (*Acacia melanoxylon*)
- Crimson Bottlebrush (*Callistemon citrinus*)
- Creeping Fig (*Ficus pumila*)

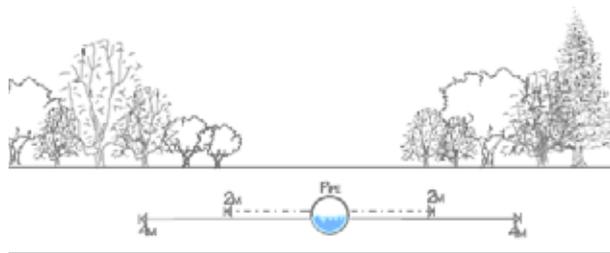
- Brisbane Laurel (*Pittosporum revoluta*)
- Sycamore (*Acer pseudoplatanus*)
- 'Rosea' Pink Marri (*Eucalyptus calophylla*)
- Broom (*Genista tinctoria*)
- Sweet Pittosporum (*Pittosporum undulatum*)
- Evergreen Alder (*Alnus jorrulensis*)
- White Mallee (*Eucalyptus falcata*)
- Jacaranda (*Jacaranda spp.*)
- Australian Pyracantha (various species)
- Heath Banksia (*Banksia ericifolia*)
- Long-leaved Box (*Eucalyptus gonicalyx*)
- Liquidambar, Sweet Gum (*Liquidambar styraciflua*)
- Water Bush (*Banksia occidentalis*)
- River Box, Black Box (*Eucalyptus largiflorens*)
- Pink Crepe Myrtle (*Logerstroemia indica*)
- Silver Birch (*Betula pendula, B. alba*)
- Silver Box (*Eucalyptus pruinosa*)
- Oleander (*Nerium oeander*)

Plant no closer than 4 metres to a sewer pipe:

- Smooth Barked Apple Myrtle (*Angophora costata*)
- Aurea Golden Ash (*Fraxinus excelsior*)
- Pagoda Tree (*Sophora japonica*)
- Silver Birch (*Betula pendula*)
- Bracelet Honey Myrtle (*Melaleuca armillaris*)
- Rowan Mountain Ash (*Sorbus aucuparia*)
- Argyle Apple (*Eucalyptus cinerea*)
- Prickly Paperbark (*M. styphelioides*)
- Chinese Wisteria (*Wisteria sinensis*)

DID YOU KNOW?

Western Water manages more than 1231km of sewer mains across our region, transferring sewage from customer's properties to recycled water plants for treatment.



Distance to plant trees and shrubs from drains and sewers