



# Planting near sewers, drains and water mains

This information sheet is designed to help property owners choose appropriate planting locations for some common tree and shrub species, minimising damage and blockages to sewers, water mains and drains.

## Roots are a growing problem

Trees and shrubs in residential areas provide many benefits for humans, native animals, insects and the environment in general.

However, depending on the species, root systems can be extremely invasive. They can cause underground damage to property foundations, fencing, telecommunication cables and to water mains and sewer pipes. They can also push up footpaths and driveways, causing trip hazards.

The damaging effects that tree roots have on nearby buildings, footpaths and fences are often obvious due to cracks. However, the effects are not as obvious below the ground where water-seeking tree roots can damage or block sewer systems, water mains and drains, sometimes involving costly repairs and removal. For example, the roots of trees, such as poplars, have been found in pipes more than 30 metres away from the base of the tree.

From a legal aspect, property owners generally have the right to plant any tree or shrub species in any location within their property. However, they become responsible for any adverse effects caused by their trees or shrubs to nearby buildings, footpaths, pipes, and other structures that may, or may not be within their property boundary.

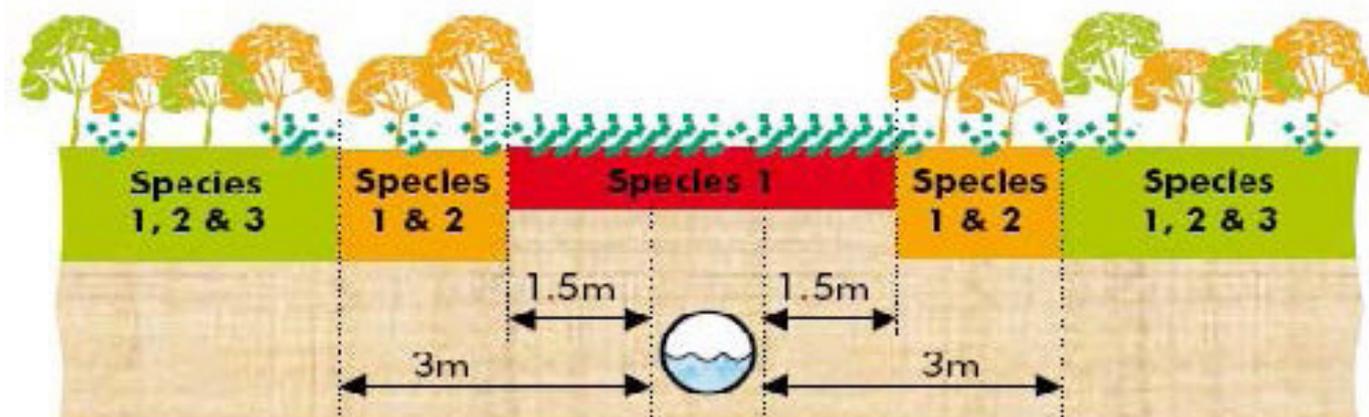
## What do root systems do?

Root systems supply the plant with water and nutrients, essential for the plant to survive and grow. Root systems continue to grow as the tree matures, always searching for water and nutrient sources underground.

Root systems will often find old and cracked stormwater, sewage, and water mains, as these are perfect food sources. Roots will continue to grow inside these pipes causing blockages and leading to overflows and flooding. The extent of root systems varies between species. Further details of suitable species are available overleaf.



*A mass of roots discovered in a sewer main during a CCTV inspection*



Recommended distance from drains and sewers to the three species of plants listed below

Species 1	
<p><b>Scientific name</b></p> <ul style="list-style-type: none"> <li>Arthropodium strictum</li> <li>Brachyscome multifida</li> <li>Bulbine bulbosa</li> <li>Carex appressa</li> <li>Chrysocephalum apiculatum</li> <li>Dianella longifolia</li> <li>Dichondra repens</li> <li>Kennedia prostrata</li> <li>Lomandra longifolia</li> <li>Poa labillardieri</li> <li>Stylidium graminifolium</li> <li>Themeda trianda</li> </ul>	<p><b>Common name</b></p> <ul style="list-style-type: none"> <li>Chocolate Lily</li> <li>Cut-leaf Daisy</li> <li>Bulbine lily</li> <li>Tall sedge</li> <li>Common Everlasting</li> <li>Pale Flax-lily</li> <li>Kidney Weed</li> <li>Running Postman</li> <li>Spiny-headed mat rush</li> <li>Common Tussock Grass</li> <li>Grass Trigger Plant</li> <li>Kangaroo Grass</li> </ul>
Species 2	
<p><b>Scientific name</b></p> <ul style="list-style-type: none"> <li>Acacia acinacea</li> <li>Correa glabra</li> <li>Correa reflexa</li> <li>Daviesia leptophylla</li> <li>Dilwynia glaberrima</li> <li>Epacris impressa</li> <li>Goodenia ovata</li> <li>Hakea ulcina</li> <li>Hibbertia obtusifolia</li> <li>Hovea linearis</li> <li>Indigofera australis</li> <li>Olearia argophylla</li> <li>Ozothamnus obcordatus</li> <li>Pultenaea gunnii</li> </ul>	<p><b>Common name</b></p> <ul style="list-style-type: none"> <li>Gold Dust Wattle</li> <li>Rock Correa</li> <li>Common Correa</li> <li>Narrow leaf bitter-pea</li> <li>Small leaf parrot-pea</li> <li>Common Heath</li> <li>Hop Goodenia</li> <li>Furze Hakea</li> <li>Showy Guinea Flower</li> <li>Common Hovea</li> <li>Austral indigo</li> <li>Musk Daisy Bush</li> <li>Grey Everlasting</li> <li>Golden Bush Pea</li> </ul>
Species 3	
<p><b>Scientific name</b></p> <ul style="list-style-type: none"> <li>Acacia myrtifolia</li> <li>Acacia paradoxa</li> <li>Bursaria spinosa</li> <li>Cassina arcuata</li> <li>Cassina aculeata</li> <li>Coprosma quadrifida</li> <li>Hakea nodosa</li> <li>Hymenanthera dentata</li> <li>Olearia lirata</li> <li>Ozothamnus ferrugineus</li> <li>Pultenaea daphnoides</li> <li>Solanum aviculare</li> <li>Spyrideum parvifolium</li> <li>Viminaria juncea</li> </ul>	<p><b>Common name</b></p> <ul style="list-style-type: none"> <li>Myrtle Wattle</li> <li>Hedge Wattle</li> <li>Sweet Bursaria</li> <li>Drooping Cassina</li> <li>Dogwood</li> <li>Prickly Current-bush</li> <li>Yellow Hakea</li> <li>Tree Violet</li> <li>Snow Daisy Bush</li> <li>Tree Everlasting</li> <li>Large-leaf Bush Pea</li> <li>Kangaroo Apple</li> <li>Dusty Miller</li> <li>Golden Spray</li> </ul>

Please note these species are only an indication of the type of species that can be planted on pipe reserves or easements and may not be indigenous to your area. For further information regarding this list please contact your local Landcare group or council.