

FACTSHEET 12: SUITABLE VEGETATION FOR EFFLUENT DISPOSAL AREAS

After effluent has been treated in a septic tank / treatment system (AWTS) it flows into the disposal area. The disposal area can consist of soil absorption trenches, or an irrigation system if a secondary treatment system, such as a wastewater treatment plant, is used. Effluent is slowly absorbed into the soil, evaporated by the sun and wind, and taken up by plants. These processes assist with the neutralisation of pollutants and pathogens.



Effluent disposal areas are often in remote areas of the garden or yard and may be forgotten or neglected. However, damaged or blocked trenches or irrigation lines, can cause effluent to surface or pool in the backyard creating health risks to you, your family, and pets. Neglected effluent distribution areas can also cause odour problems for your household or your immediate neighbours. Left unchecked they may ultimately require messy and expensive repairs.

- Do not plant large trees or shrubs in the disposal area as roots can invade and clog trenches. Shade from large trees can also reduce the effectiveness of the absorption area. Large trees should be a minimum of 20m away.
- Small water loving trees and shrubs planted no closer than 5m and down-slope from the disposal areas can improve effluent absorption.
- Plant up effluent disposal areas with shallow rooting grasses, herbs, and sedges, which are water tolerant, and suitable for local conditions.

IMPORTANT NOTE:

Plant tolerance to wastewater irrigation depends on a range of factors. Existing soil type, drainage, nutrient levels and pH are some. The amount of wastewater distributed over the given area and the quality of the water will be the main factors that influence the final outcome. Plants have a limited tolerance to some of the nutrients and salts that can come through a system. Phosphorus, Boron and various Sodium salts are common nutrients that may come through a system and accumulate in the soil to problem levels.

- Such plants can assist in the effective functioning of soil absorption trenches (see overleaf for a list of suitable local plants).
- Shallow rooted plants in areas between absorption trenches can assist with water uptake. However, only grass should be grown directly over absorption trenches.

Some basic household rules to assist your plantings:

- Choose phosphorus free cleaning products
- Choose liquid detergents instead of powders

The plants listed on *page 2* were chosen for their general tolerance to higher nutrient levels and to moderate salt levels. The plants suggested vary in their ability to tolerate periods of high soil moisture. Keep in mind that soil moisture will:

- Depend on drainage (soil texture and structure)
- Reduce as plants grow and use water
- Vary from summer to winter

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The following plants are known to occur in the Moyne Shire and as a guide are adapted to wet or boggy areas or can tolerate periods of inundation.

Botanical Name	Common Name	Soil Types	Height (Mature Plant)
Trees & Shrubs			
Leptospermum lanigerum	Woolly Tea-tree	Most wet soils	To 6m
Melaleuca squarrosa	Scented Paperbark	Most wet soils	To 3m
Goodenia ovata	Hop Goodenia	Most soils	To 2m
Leptospermum continentale	Prickly Tea-tree	Most wet soils	To 2m
Atriplex cinerea	Coast Saltbush	Light, free draining	To 1.8m
Atriplex paludosa	Marsh Saltbush	Light, free draining	To 1.6m
Indigofera australis	Austral Indigo	Most soils	To 1.5m
Leptospermum myrsinoides	Heath Tea-tree	Most soils	To 1.5m
Atriplex semibaccata	Creeping Saltbush	Light, free draining	To 40cm
Sedges, Rushes, Lilies			
Poa labillardierei	Tussock Grass	Most soils	To 60cm
Lepidosperma longitudinale	Common Sword-sedge	Light, free draining	To 2m
Eleocharis sphacelata	Tall Spike-rush	Heavy, wet soils	To 2m
Gahnia clarkei	Tall Saw-sedge	Most wet soils	To 1.5-4m
Juncus procerus	Tall Rush	Most wet soils	To 1.8m
Carex appressa	Tall sedge	Most soils	To 1.5m
Dianella longifolia	Pale Flax-lily	Most soils	To 1.3m
Juncus kraussii	Sea Rush	Most wet soils	To 1.2m
Lepidosperma filiforme	Common Rapier-sedge	Light, free draining	To 1m
Isolepis nodosa	Knobby Club-rush	Most wet soils	To 1m
Gahnia filum	Saw-sedge	Most wet soils	To 1m
Lomandra longifolia	Spiny-headed Mat-rush	Light, free draining	To 1m
Dianella tasmanica	Tasman Flax-lily	Most soils	To 1m
Lepidosperma semiteres	Wire Rapier-sedge	Light, free draining	To 1m
Baumea juncea	Bare Twig-sedge	Most soils	To 90cm
Patersonia occidentalis	Long Purple-flag	Most wet soils	To 80cm
Schoenus brevifolius	Zig-zag Bog-rush	Most wet soils	To 80cm
Eleocharis acuta	Common Spike-rush	Heavy, wet soils	To 60cm
Patersonia fragilis	Short Purple-flag	Most wet soils	To 60cm
Baumea acuta	Pale Twig-sedge	Most soils	To 50cm
Schoenus lepidosperma	Slender Bog-rush	Most wet soils	To 45cm
Schoenus tesquorum	Soft Bog-rush	Most wet soils	To 45cm
Isolepis inundata	Swamp Club-sedge	Most wet soils	To 40cm
Carex breviculmis	Common Grass-sedge	Most soils	To 30cm

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