

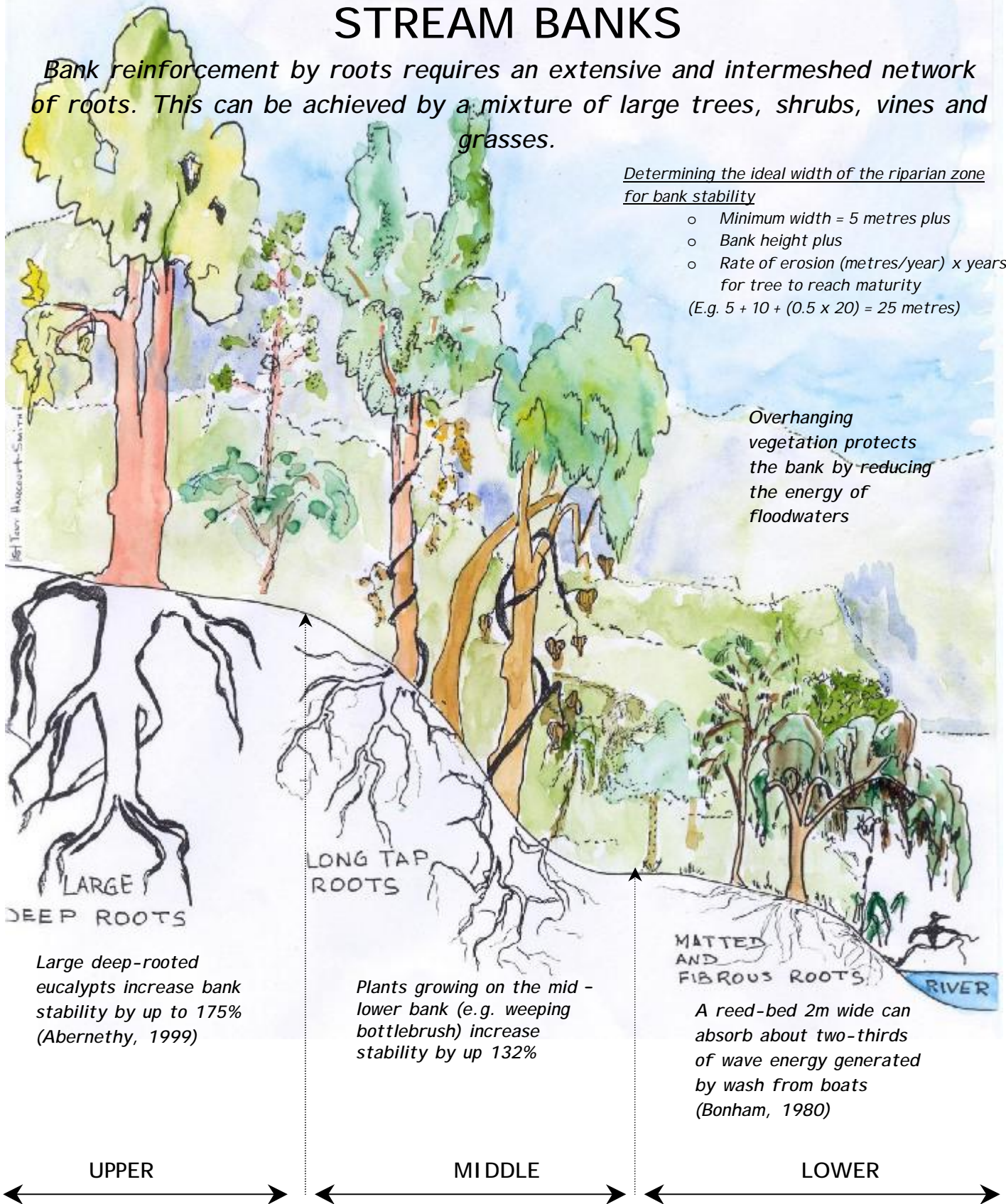
# STABILITY & LOCATION OF SPECIES ON STREAM BANKS

Bank reinforcement by roots requires an extensive and intermeshed network of roots. This can be achieved by a mixture of large trees, shrubs, vines and grasses.

## Determining the ideal width of the riparian zone for bank stability

- o Minimum width = 5 metres plus
  - o Bank height plus
  - o Rate of erosion (metres/year) x years for tree to reach maturity
- (E.g. 5 + 10 + (0.5 x 20) = 25 metres)

Overhanging vegetation protects the bank by reducing the energy of floodwaters



Riverbank Vegetation has a major impact on bank stability, channel shape and health of the waterway. Vegetation reduces flow velocity, improves bank stability by binding bank material, filters nutrients, traps sediments, moderates water temperature fluctuations and light conditions, improves habitats for all in-stream inhabitants and enhances social amenity.

This is a small selection of native scrub plants which occur along the freshwater lower reaches of the Mary River

Top bank	Middle bank	Lower bank
<i>Araucaria cunninghamii</i> - hoop pine	<i>Acacia aulacocarpa</i> - brown salwood,	<i>Callistemon viminalis</i> - weeping bottlebrush
<i>Argyrodendron trifoliolatum</i> - brown tulip oak	<i>Alphitonia excelsa</i> - soap tree	<i>Casuarina cunninghamii</i> - river sheoak
<i>Cassia brewsteri</i> - Leichhardt bean, laburnum	<i>Alyxia ruscifolia</i> - chain fruit	<i>Ficus coronata</i> - sandpaper fig
<i>Cupaniopsis parvifolia</i> - green leaved tamarind	<i>Aphananthe philippinensis</i> - rough-leaved elm	<i>Lomandra hystrix</i> - matrush
<i>Euroschinus falcata</i> - pink poplar	<i>Arytera species</i> - native tamarinds	<i>Lomandra longifolia</i> - matrush
<i>Eucalyptus tereticornis</i> - blue gum	<i>Canthium odoratum</i> - shiny-leaved canthium	<i>Melaleuca linarifolia</i> - snow in summer
<i>Ficus macrophylla</i> - Moreton Bay fig	<i>Castanospermum australe</i> - blackbean kurrajong	<i>Syzygium australe</i> - scrub cherry
<i>Flindersia australis</i> - crow's ash	<i>Commersonia bartramia</i> - brown kurrajong	<i>Waterhousia floribunda</i> - weeping lily pilli
<i>Grevillea robusta</i> - silky oak	<i>Cordyline species</i> - palm lilies	
<i>Lophostemon suaveolens</i> - swamp mahogany	<i>Cryptocarya species</i> - native laurels	
<i>Mallotus philippensis</i> - red kamala	<i>Diospyros species</i> - native ebonies	
<i>Melia azederach</i> - white cedar	<i>Dysoxylum gaudichaudianum</i> - ivory mahogany	
<i>Parachidendron pruinsum</i> - snow wood	<i>Elaeocarpus obovatus</i> - hard quandong	
<i>Pittosporum rhombifolium</i> - diamond leaf pittosporum	<i>Ficus fraseri</i> - sandpaper fig	
<i>Polyscias elegans</i> - celerywood	<i>Ficus racemosa</i> - cluster fig	
<i>Pouteria pohlmaniana</i> - yellow boxwood	<i>Flindersia schottiana</i> - bumpy ash	
<i>Sterculia quadrifida</i> - peanut tree	<i>Glochidion summatranum</i> - buttonwood	
<i>Toona ciliata</i> - red cedar	<i>Harpullia hillii</i> - tulipwood	
	<i>Hymenosporum flavum</i> - native frangipani	
	<i>Jagera pseudorhus</i> - foambark	
	<i>Mallotus claoxyloides</i> - green kamala	
	<i>Oplismenus aemulus</i> - creeping beard grass	
	<i>Pandorea pandorana</i> - wonga vine	
	<i>Pavetta australiensis</i> - pavetta,	
	<i>Streblus brunonianus</i> - whalebone tree	
	<i>Syzygium francisii</i> - giant water gum	
	<i>Tabernaemontana pandacqui</i> - banana bush	
		Note: Some species occur in adjacent zones.

For further information call:

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