

RIPARIAN PLANTING GUIDE

EAST OTAGO REGION

Riparian zones are the land beside a creek, river, lake or wetland. Planting native grasses, sedges, flaxes, shrubs and/or trees in riparian zones can improve the health of Otago's waterways by filtering nutrients before they reach the water, including nitrogen, phosphorus and bacteria such as *E. coli*.

Riparian planting has other benefits too:

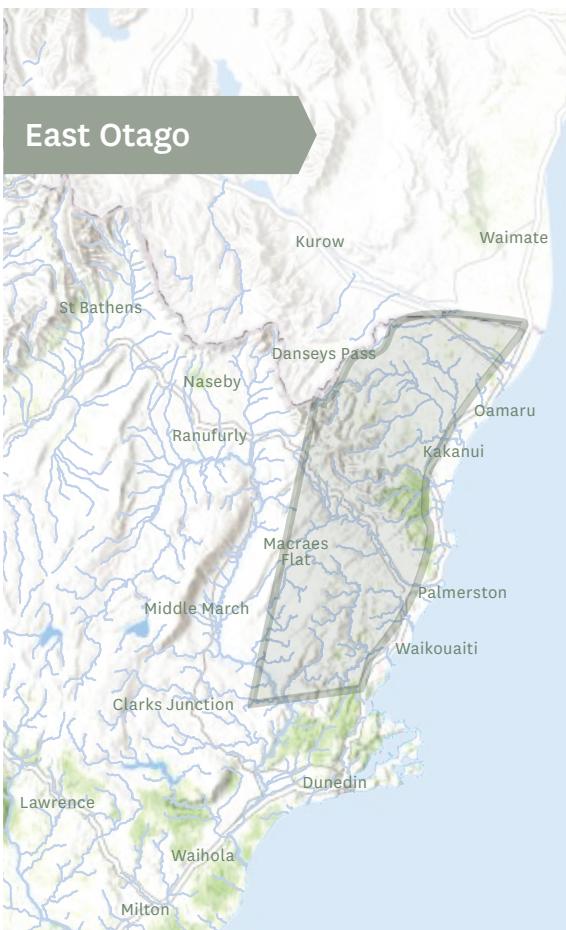
- ✓ Enhanced ecosystem health (including habitat for insects) and increased biodiversity
- ✓ Reduced sediment runoff and increased bank stabilisation
- ✓ Provides shade that decreases waterway temperatures (this reduces weed growth and provides stable temperatures for aquatic organisms)
- ✓ Provides shelter for stock
- ✓ Potential recreational opportunities such as fishing and swimming spots

Check this guide to see which plants will work best for where you live.

Planting guides are also available for Central Otago, Coastal Otago, South Otago, and Upper Clutha.



Otago is the second largest region in New Zealand and we have a diverse range of landscapes, so it's important to choose the right plants for your climate and soil type.



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Zone	Plant	Space between plants (m)	Size height (m) x width (m)	full sun	frost	wind	moist soil /wet soil	birds	pollinators	fish	Benefits	Notes
LOWER BANK	Purei <i>Carex secta</i>	1.5	2 x 1.5	•	•	•	•	•	○	•	Their overhanging leaves great egg-laying habitat for inanga.	
Groudndcover	Sedge <i>Carex virgata</i>	1	1 x 1	•	•	•	•	•	○	•	Provide shelter and nesting habitat for birds, such as marsh crake.	
MIDDLE BANK	Haraakeke/Flax <i>Phormium tenax</i>	2	2 x 2	•	•	•	•	•	•	○	Good for erosion control. Best planted a row back from the bank edge due to their larger size.	
Groundcover / small shrubs	Toetoe <i>Austrodieria richardii</i>	2	2 x 2								Useful in retaining steep banks.	
MIDLE BANK	Red Tussock <i>Chionochloa rubra</i>	1	1 x 1	•	•	•	•	•	○	○	Plant in any soil except waterlogged soil.	
Trees / large shrubs	Coprosma <i>Coprosma crassifolia</i>	4	4 x 4	•	•	•	•	•	○	○	Berries attract skinks. Upright columnar habit is good for narrow spaces.	
MIDLE BANK	Mingimingi <i>Coprosma propinqua</i>	1.5	4 x 2	•	•	•	•	•	•	○	Good for erosion control. Flowers are white and inconspicuous but sweetly fragrant.	
Trees / large shrubs	Matagouri <i>Discaria toumatou</i>	2	4 x 2	•	•	•	•	•	•	○		
MIDLE BANK	Koromiko <i>Veronica salicifolia</i>	1.5	2 x 2	•	•	•	•	•	○	○		
Trees / large shrubs	Mikimiki / Yellow Wood <i>Coprosma linariifolia</i>	2	8 x 2	•	•	•	•	•	•	○		
MIDLE BANK	Cabbage Tree <i>Cordyline australis</i>	1 - 1.5	10 x 3	•	•	•	•	•	•	○	Good for bank stabilisation and tolerates very wet to moderately dry conditions.	
MIDLE BANK	Mānuka <i>Leptospermum scoparium</i>	2	5 x 2	•	•	•	•	•	○	○	Match the planting conditions to the seed source*	
MIDLE BANK	Māhoe/Whiteywood <i>Melicytus ramiflorus</i>	2.5	9 x 3	•	•	•	•	•	•	○	Tolerates damp to very dry conditions. Not frost tolerant as a sapling.	
MIDLE BANK	Weeping Matipo <i>Myrsine divaricata</i>	1.5	6 x 2.5	•	•	•	•	•	•	○		
MIDLE BANK	Twiggy Tree Daisy <i>Olearia lineata</i>	2	5 x 3	•	•	•	•	•	○	○	Threatened in the wild.	
MIDLE BANK	Hector's Tree Daisy <i>Olearia hectorii</i>	2	9 x 3	•	•	•	•	•	○	○	Threatened in the wild. Fast growing and a good willow substitute.	
MIDLE BANK	Kaikomako <i>Pennantia corymbosa</i>	3	8 x 6	•	•	•	•	•	•	○	Will grow in partial and full shade. Very attractive to birds, especially bellbirds.	
MIDLE BANK	Ribbonwood <i>Plagianthus regius</i>	2	10 x 3	•	•	•	•	•	•	○	Deciduous tree, fast growing. Good for bank stabilisation.	

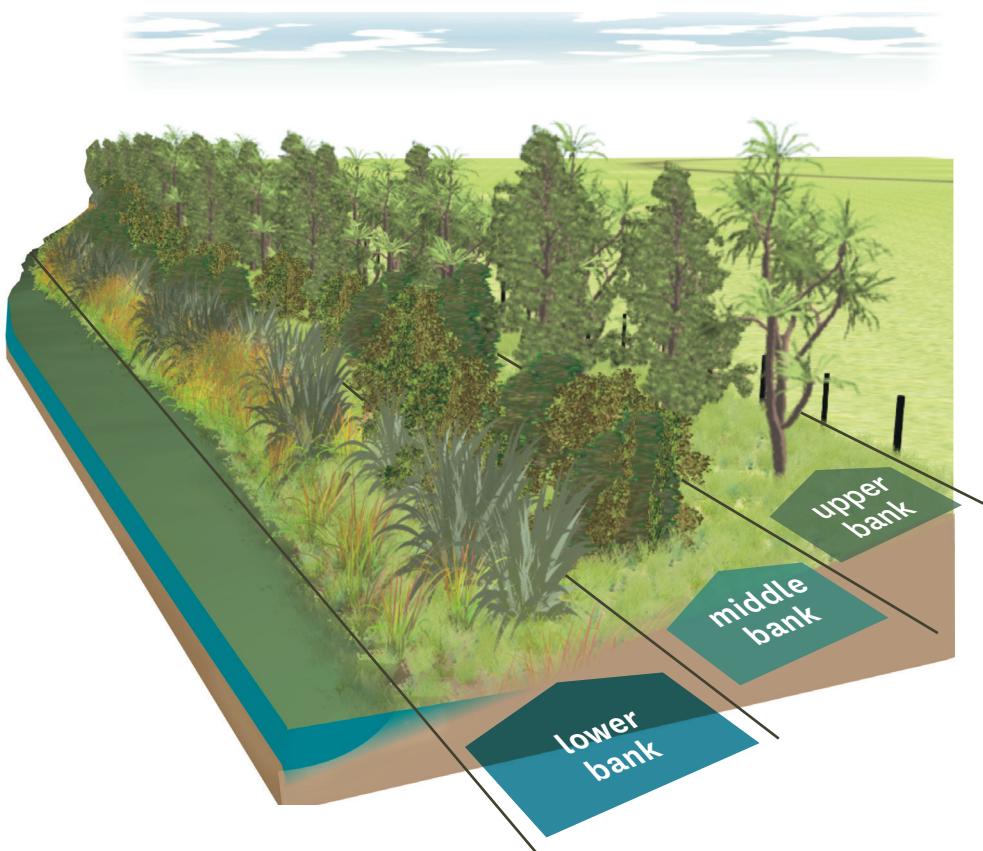
*E.g. plant seed collected from wet areas into wet areas, dry seed sources planted into dry areas.

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FAST OTAGO REGION



Zone	Plant	Groundcover / small shrubs		Trees / large shrubs		UPPER BANK	
		Space between plants (m)	Size height (m) x width (m)	Tolerants	Benefits	Notes	
	Korokio <i>Corokia cotoneaster</i>	1.5	2 x 1.5	• full sun frost	• birds pollinators	• ○	Avoid planting in areas that can have high moisture levels.
	Scented Tree Daisy <i>Olearia odorata</i>	2	4 x 2	• •	○ ○	• ○	Threatened in the wild.
	Marble Leaf <i>Carpodetus serratus</i>	3	8 x 3	• •	○ •	○	
	Kahikatea <i>Dacrycarpus dacrydioides</i>	3	60 x 5	• ○	○ •	•	Good for erosion control.
	Pokaka <i>Elaeocarpus hookerianus</i>	3	12 x 15	○ ○	○ •	○	
	Broadleaf <i>Griselinia littoralis</i>	2	10 x 3	• •	○ ○	○ ○	Good for erosion control.
	Narrow-leaved Lacebark <i>Hoheria angustifolia</i>	2	5 x 2	• •	○ ○	• ○	Fast growing.
	Kānuka <i>Kunzea ericoides</i>	2	30 x 3	• •	○ ○	• ○	
	Lemonwood <i>Pittosporum eugenioides</i>	3	7 x 5	• •	○ ○	• ○	Good for bank stabilisation.
	Kōhūhū <i>Pittosporum tenuifolium</i>	2	5 x 4	• •	○ ○	• ○	Good for bank stabilisation.
	Hall's Totara <i>Podocarpus hallii</i>	3	12 x 7	○ ○	• ○	• ○	Good for bank stabilisation.
	Totara <i>Podocarpus totara</i>	3	30 x 8	• •	○ ○	• ○	Grows best with some shelter. Not frost tolerant as a sapling.
	Kōwhai <i>Sophora microphylla</i>	2	8 x 5	• •	○ ○	• ○	Not frost tolerant as a sapling.



Riparian zones can generally be divided into three areas:

■ **Lower bank area**

Prone to flooding. Best for plant species that can tolerate waterlogged roots and survive many days under water.

■ **Middle bank area**

Plant species that can tolerate having damp feet.

■ **Upper bank area**

May partially flood every couple of years. Plant tree and shrub species that prefer dry conditions.

This guide is not an exhaustive list and we recommend you talk to your local nursery to find out more about what grows best where you live.

When is the best time to plant?

Spring is an ideal time to plant, although planting can be undertaken all year round dependent on specific site conditions.

Summer and winter are the least preferable seasons as plants are likely to be under

stress. If you're planting in summer, you will probably need to water the plants or add water retention crystals to ensure good plant survival.

If you're planting in autumn, make sure the plants have a few months to establish if they are likely to be inundated with water during winter/spring flows.