

RIPARIAN PLANTING GUIDE

COASTAL 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

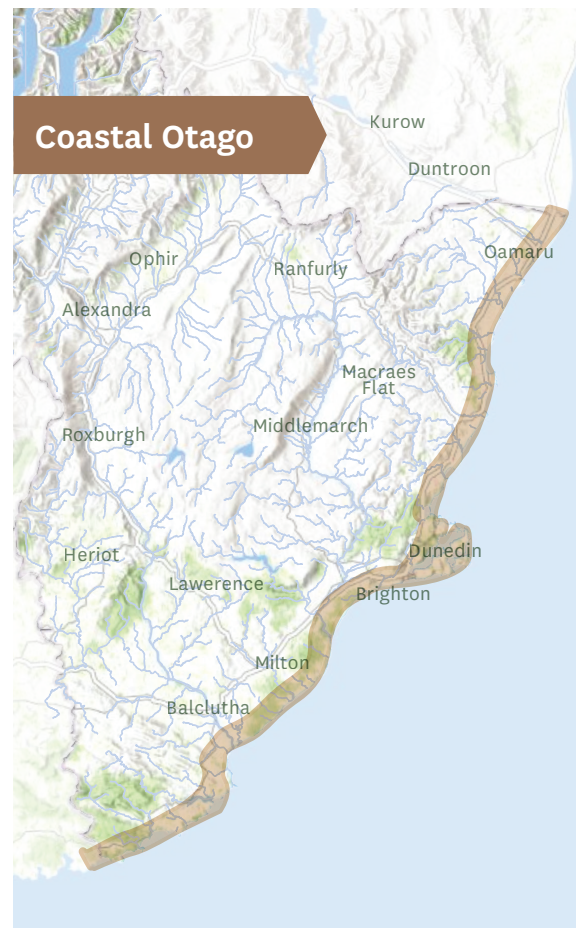
Check this guide to see which plants will work best for where you live.

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



■ Coastal Otago

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.



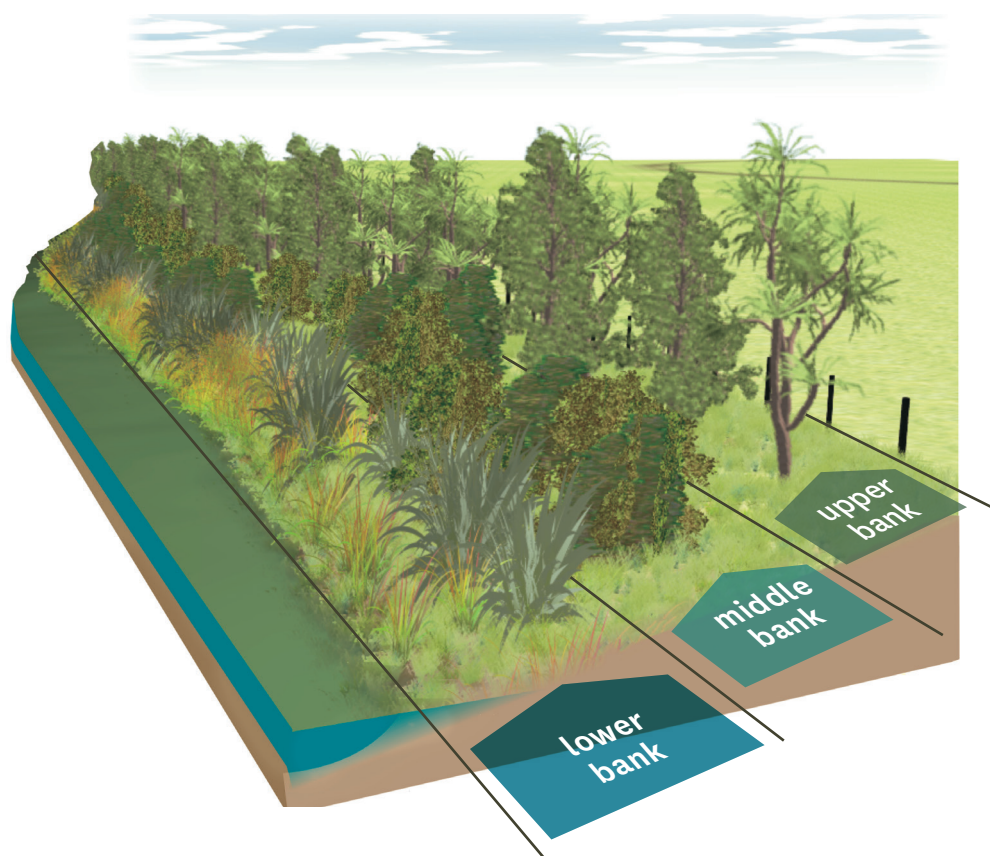
COASTAL OTAGO REGION

**MIDDLE
BANK**

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

Zone	Plant	Space between plants (m)	Size height (m) x width (m)	Tolerants				Benefits			Notes
				full sun	frost	wind	moist /wet soil	birds	pollina- tors	fish	
UPPER BANK Trees / large shrubs	Kahikatea <i>Dacrycarpus dacrydioides</i>	3	60 x 5	•	•	•	•	•	•	•	Good for erosion control.
	Broadleaf <i>Griselinia littoralis</i>	2	10 x 3	•	•	•	○	•	○	○	Good for erosion control.
	Kānuka <i>Kunzea ericoides</i>	2	30 x 3	•	•	•	○	○	•	○	
	Ngaio <i>Myoporum laetum</i>	3	7 x 4	•	○	•	○	•	•	○	Leaves can cause sickness and death if eaten by stock. Fast growing and avoided by rabbits.
	Matipo <i>Myrsine australis</i>	2	5 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. Not wind tolerant as a sapling.
	Totara <i>Podocarpus totara</i>	3	30 x 8	•	•	•	○	•	•	○	Grows best with some shelter. Not frost tolerant as a sapling.
	Lancewood <i>Pseudopanax crassifolius</i>	2	12 x 3	•	○	•	○	•	•	○	Good for erosion control.
	Kōwhai <i>Sophora microphylla</i>	2	8 x 5	•	•	•	○	•	○	○	

UPPER
BANK



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.