

## **Plants for riparian margins**

SUSTAINABLE LAND MANAGEMENT



Riparian cross section.



Figure 1: Appropriate plants should be selected for each site in a riparian margin.

For further advice or information about sustainable land management contact:

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## INTRODUCTION

Complete retirement of the riparian margin is the best option for riparian management as it stabilises streambanks, and improves water quality.

Planting with native species that have been sourced locally is recommended for most areas as the plants are adapted to the conditions and therefore grow well, as well as restoring natural habitat.

A diagram of a riparian margin and the various zones is shown in the Taranaki Regional Council's information sheet *Why manage stream banks? The importance of riparian management.* 

In the zone next to the water's edge (Zone C) low growing plants with their growing points at the base (flax, toetoe, carex) are best as they can cope with flooding. The leaves bend with the flow of water, do not impede the flow and do not get broken off.

Further up the bank where the force and frequency of flooding is less, taller species are recommended to provide bank stability and eventually provide shade for the water. Once the native plants are well established they will seed, new plants will grow to replace the original ones as they get old and die, and the area will more or less look after itself.

Number 25

It is important in selecting plants for the margin to consider not only the general locality (ie coastal, upper ringplain), but also whether the soil is dry or waterlogged. Different plants prefer different habitats. By choosing the right plants for specific sites, it is likely there will be greater success in establishment. The table on the back of this sheet provides this information.

If the B Zone margin is quite wide (more than 3 rows or about 7m), there is the option to plant timber species in the outer rows before the fence. Felling can be carried out into the paddock away from the stream. These can be either long-term native species such as totara or exotics such as pine or eucalypt.

If there is a particular weak point or eroding bank along the stream it may be appropriate to plant shrub or ossier willows at that location. Shrub willows have multiple stems and are flexible. These types of willow while unlikely to spread, can form dense thickets, which suppress ground cover. They should only be planted where necessary. Seek advice from the Taranaki Regional Council before using them.

The Council, as well as providing free advice and individual riparian plans for properties, contracts local nurseries to supply the plants required for riparian management. These are passed on "at cost" to landowners who have riparian plans.