

Part Three *Concept Plan*

1.0 Concept Plans

The following is a Concept Plan that provides a more detailed explanation of the features proposed / identified in Part 2 of this Reserve Management Plan.

The Concept Plan outlines particular elements which are related to the long term vision for the enhancement of the Reserve, as outlined in Part 2. The Plan is schematic only and more detailed design work based on the identified elements is required before implementation.

2.0 Design Guidelines

Revegetation Guideline

Included in this section, is a revegetation guideline. These are general guidelines for riparian enhancement. The species list is not intended to be a definitive list, but is a guideline offering suitable species and a recommended structure for their planting.

The aim of all revegetation is to establish a continuous healthy vegetation cover that will inhibit the re-establishment of weeds, increase the floristic structural and habitat diversity of riparian vegetation, provide an effective buffer against runoff, and increase in-stream habitat quality and diversity.

In order to achieve this, dense stands of trees and shrubs should be planted clear of the margins. Planting should be undertaken in blocks, as closely as possible (depending on the species) in order to establish a continuous cover of vegetation. Vegetation structure should follow a multi-tiered approach.

Waters edge/wetland margin

Provide shade and temperature regulation to the stream channel while allowing adequate light for low growing species to develop. Suggested species:

- Bolboschoenus;
- Carex; and
- Cyperus spp.

Lower stream bank

Encourage vigorous, dense ground covers. Flax is not suitable at the immediate water's edge within areas of bank subject to overland flows. Suggested species:

- grasses;
- sedges;
- low mats; and
- toetoe.

Mid bank

Small, fleshy-fruited shrubs and small trees to supply immediate food supply for birds. Kowhai and tree fuchsia are recommended for stream bank stabilisation. Kowhai has a deep wide spreading root system with sparse foliage that does not inhibit the establishment of ground cover. Suggested species:

- flax;
- kowhai;
- fuchsia;
- pigeonwood;
- nikau;
- coprosma spp;

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- mapou;
 - kanuka; and
 - manuka.

Upper bank

Larger trees including fruiting trees that will attract kereru and will also provide suitable nesting sites for a range of birds. Suggested species:

- karaka;
- kahikatea;
- rewarewa;
- pohutukawa;
- kauri;
- rimu;
- rata;
- taraire;
- puriri;
- miro;
- kohekohe;
- titoki;
- matai; and
- tawa.