Vegetated buffer width	Potential PC1 contaminant reduction	Potential additional benefits
5 metres	Perrenial ryegrass filter strip – removes large particulate sediment	Some adsorbed particlate P removal Reduced bank erosion by stock If well-vegetated (with indigenous trees): Provides shade – temperature reduction in small streams Provides habitat - inputs of wood and leaves
10 metres	Effective removal of fine sediment (80-90%) >10 m improved particulate N and P removal 10-13 m removal of dissolved nutrients 67% (N) and 55% (P)	Dissolved nutrient removal via infiltration - improved by root structure of vegetation (trees) Large trees on strip edges increase effective width for greater nutrient removal
20 metres	Removes 90% of sediment Removes sediment-bound nutrients (primarily P) 10-30 m effective for dissolved N and P removal (excluding sub-surface N and P from groundwater or drainage flows to streams)	Self-sustaining indigenous vegetation with less need for weed control Shade and habitat provision depending on stream size and vegetation Provides for riparian fish spawning habitat