

**ESTIMATED COSTS FOR MANGROVE REMOVAL
(NOT INCLUDING ANY ASSOCIATED CATCHMENT PROGRAMMES)**

LARGER SCALE MANGROVE REMOVAL UNDERTAKEN IN AUCKLAND				
Applicant	Cost of resource consent	Area of removal	Removal and disposal method	Cost of removal
Papakura District Council	\$38,000 (notified & full hearing process)	27 ha Stage 1: 3 ha Stage 2: 24.6 ha	Contractor cutting, bundling & removing by helicopter to land. Trucked to green waste and mulched.	Est for 3 ha = \$100,000. Est for 26.6 ha = \$740,000 ex monitoring costs
Franklin District Council	\$5,000 (in accordance with CCMP ¹ & non-notified) \$8,000 consultant fee for AEE ² for info not covered in CCMP	9 ha	Community volunteers – core grp of 10 + others. Removal = using chainsaw & spade to remove. Bundled onto cradles and lifted onto barge. On land chipped by contractor, used as mulch on esplanade reserve and people who request mulch.	Chipping cost = approx \$35,000 yr Barge = approx \$7000 (plus volunteer contributions) Gear (rope, spades etc) = \$10,000 Approx \$250 advertising working bees etc
Auckland International Airport	\$2,500 Consent process = in Airport Management Area; non-notified under rule 32.5.13 + \$2,000 AEE = \$10,000	13 ha Stage 1: 1ha trial Stage 2: 12 ha	Mechanical removal with ‘mudtrack mulcher’. (removes above ground mangroves & mulch to 5cm or less) Trial 1 ha removal leaving mulch in situ to disperse in harbour by wind & tide action. Monitoring - if mulch remains on site & has adverse effects alternative methods of removal will be implemented for remainder of area.	Estimate for 1 ha = \$10,000 Est for 12 ha = \$35,000 Baseline monitoring = \$10,000 Monitoring during works = \$15,000 Post monitoring = \$15,000 or less a year

¹ Coastal Compartment Management Plan

² Assessment of Environmental Effects

MECHANICAL MANGROVE REMOVAL UNDERTAKEN IN TAURANGA

Applicant	Cost of resource consent	Area of removal	Removal and disposal method	Cost of removal, monitoring etc.
BOPRC 2009/10	\$50,000 (notified consent, including consent costs, consultants and staff time)	Approx. 50 ha removed	Mechanical removal (wide tracked digger with mulching head) Disposal – in situ	Removal contract: \$70,000 Access works \$1,000 Monitoring (birds): \$4,000 Misc materials: \$1,600 Cultural reports: \$2,300 Staff time: \$47,000 Total (including resource consent): \$152,900
BOPRC 2010/11	\$5,000 (associated with access earthworks and consent condition variation)	Approx. 50 ha removed	Mechanical removal (wide tracked digger with mulching head) Disposal – in situ	Removal contract: \$67,000 Access works: \$5,200 Monitoring (birds): \$2,300 Misc. Materials: \$200 Staff time: \$59,000 Alternative removal trials \$13,200 Total (including resource consent): \$151,900
BOPRC 2011/12		Approx. 10 ha removed	Mechanical removal (wide tracked digger with mulching head) Disposal – in situ	Removal contract: \$17,500 Staff time: \$12,200 Seedling machine development: \$20,000 Total: \$49,700