

**Table 2.** Relative areas (ha) of wetland vegetation at the six monitoring sites, as shown in recent and historical aerial photographs (see Appendix D). In the case of the 1975 photograph of Lucas Creek, mangroves were mapped in only two classes: 0-50% cover (\*) and 50-100% cover (\*\*)  
because the quality of the photograph did not permit further resolution.

Site	Date	Freshwater wetland	Saltmarsh	Shellbank	0-25% mangrove	25-50% mangrove	50-75% mangrove	75-100% mangrove	Total mangrove	Area of estuary (ha) (as % of catchment area)
Lucas Creek	1950	1.2	0.9	0	11.0	3.3	1.2	32.0	47.5	155.7
	1975	0.5	0.4	0	7.1*		33.2**		40.3	(4.5)
	1988	0.4	0.4	0	1.3	1.6	2.0	43.1	48.0	
	1996	1.7	0.6	0	1.2	7.0	1.2	48.1	50.5	6.3% increase in mangrove cover 6.3% in 46 yr
Mangamangaroa Estuary	1960	0.2	0.5	0.7	0.6	0.9	0.6	8.5	10.5	54.1
	1997	0.5	0.7	2.2	1.9	1.4	0.5	12.5	16.2	54% ↑ 37 yr (5.9)
Mullet Creek	1953	0	0.7	0	2.8	0.8	1.2	8.9	13.7	30.1
	1996	0	0.8	0	0.9	0.7	0	14.6	16.2	18% ↑ 43 yr (5.8)
Okura Estuary	1951	0	0.1	1.5	4.6	1.6	1.9	7.8	15.9	130.1
	1996	0	0.3	1.1	3.4	1.4	0.9	19.2	24.9	57% ↑ 45 yr (5.7)
Puhinui Inlet	1939	4.7	30.8	4.7	1.6	1.5	3.0	8.4	14.4	119.2
	1969	5.7	28.1	5.7	0.5	0.6	1.2	23.4	25.8	(4.8)
	1996	4.4	19.8	2.5	1.6	0.2	3.4	32.5	37.7	162% ↑ 57 yr
Whangapoua Harbour	1960	174.9	24.6	2.5	16.4	1.9	1.0	68.7	88.0	222.5
	1999	64.1	26.4	1.5	24.9	22.8	4.3	110.4	162.4	85% ↑ 39 yr (8.6)

