

APPENDIX 1. Summary statistics of line transect data (nb. The before flood data was based on two 20m line transects [40m], the after flood data, due to poor visibility was based on the average of three 15m transects [45m]). Where E is the total cover, and n, SD and mean are the number of recordings, standard deviation and mean of each particular category.

SITE 1 (Miall Island) before the flood at 0.5m below LWD

	n	E	SD	mean	%
Hard coral	41	1451	36.6	35.4	36.5%
Sand/rubble	27	2362	101.1	87.5	59%
Turf algae	2	85	10.6	42.5	2%
Dead coral	4	59	6.9	14.8	1.5%
Soft coral	2	43	3.5	21.5	1%

AFTER THE FLOOD at -1.5m.

	n	E	SD	mean	%
Hard coral	3	112	32.8	37.4	8%
Sand/rubble	5	455	78.9	91	30%
Turf algae	4	144	15.2	36.0	10%
Dead coral	13	472	13.5	36.3	31%
Bleached coral	8	317	34.4	39.5	21%

SITE 2 (Middle Island) before the flood at 1.0m below LWD

	n	E	SD	mean	%
Hard coral	35	3311	85.1	94.6	83%
Macroalgae	18	293	12.7	16.3	7%
Dead coral	2	16	2.8	8.0	1%
Sand/rubble	5	257	12.6	51.4	6%
Turf algae	4	123	21.2	31.0	3%

AFTER THE FLOODS

At 1.5m below LWD.

	n	E	SD	mean	%
Live hard coral	5	327	84.8	65.4	22%
Bleached coral	20	699	65.1	34.9	46%
Dead coral	3	324	281.9	108	22%
Sand/rubble	4	150	14.2	37.5	10%

At 2.0m below LWD

	n	E	SD	mean	%
Live hard coral	22	1170	60.1	53.2	78
Bleached coral	2	52	8.6	26.0	4%
Dead coral	3	45	7.9	15.0	3%
Sand/rubble	5	233	13.2	46.6	15%

SITE 3 (Monkey Bay) before the floods at 1.0m below LWD

	n	E	SD	mean	%
Hard coral	80	2574	62.4	32.1	64%
Macroalgae	61	1164	16.6	19.1	29%
Turf algae/rubble	16	246	23.7	15.4	6%
Coralline algae	3	16	7.2	5.3	1%

AFTER THE FLOOD

	n	E	SD	mean	%
Hard coral	5	152	28.8	30.4	10
Bleached coral	1	8	0	8	1
Dead coral	14	1182	108.9	84.4	78
Turf algae	6	148	11.8	24.7	10
Coralline algae	2	10	1.4	5.0	1

SITE 4 (Clam Bay) before the floods at 1.0m below LWD

	n	E	SD	mean	%
Hard coral	12	3740	347.6	311.6	93.5%
Rubble	3	260	116.8	86.6	6.5%

At 8.5m below LWD

	n	E	SD	mean	%
Hard coral	15	2129	162.9	141.9	53%
Sand/rubble	12	1871	143.8	155.9	47%

AFTER THE FLOODS

At 1.0m below LWD

	n	E	Sd	mean	%
Live hard coral	0	0	0	0	0
Dead coral	1	1500	-	1500	100%

At 2.0m below LWD

	n	E	SD	mean	%
Live hard coral	5	134	22	26.8	9
Dead coral	9	1309	182.4	145.4	87
Bleached coral	3	57	18.5	19	4

At 2.5m below LWD

	n	E	SD	mean	%
Live hard coral	12	493	35.4	41.5	33
Dead coral	20	762	20.9	38.1	51
Bleached coral	10	245	14.9	24.3	16

At 4.0m below LWD

	n	E	SD	mean	%
Live hard coral	13	1190	112	91.5	79
Dead coral	4	153	14	38.3	10
Bleached coral	2	67	0.7	33.5	5
Rubble	1	90	0	90	6

At 6.0m below LWD

	n	E	SD	mean	%
Live hard coral	7	1328	192	189.7	89
Bleached coral	4	113	3.4	28.3	8
Sand/rubble	1	59	0	59	3

At 7.0m below LWD

	n	E	SD	mean	%
Live hard coral	10	1187	136	118.7	79
Bleached coral	1	7	0	7	1
Soft coral	2	43	0.7	21.5	3
Sand/rubble	3	263	78.2	87.7	17

SITE 5 (Halfway Island) at 0.5m above LWD

	n	E	SD	mean	%
Hard coral	48	2640	43.2	55.0	66%
Soft coral	2	35	3.5	17.5	1%
Turf algae	7	196	10.8	28.0	5%
Sand/rubble	23	1129	39.6	49.1	28%

AFTER THE FLOODS

At 0.3m below LWD

	n	E	Sd	mean	%
Dead coral	12	1037	81.1	86.4	69%
Sand/rubble	6	463	44.3	77.2	31%

At 0.8m below LWD

	n	E	SD	mean	%
Bleached coral	7	156	13.8	22.3	10%
Dead Coral	9	510	46.6	56.6	34%
Sand/rubble	10	834	64.3	83.4	56%

At 1.5m below LWD

	n	E	SD	mean	%
Live hard coral	1	9	0	9	1%
Bleached coral	2	53	7.8	26.5	3%
Dead coral	1	45	0	45	3%
Sand/rubble	12	1090	60.1	90.8	73%
Macroalgae	7	303	86.4	43.3	20%

SITE 6 (Humpy Island) at LWD.

	n	E	SD	mean	%
Before the flood					
Hard coral	26	752	25.1	28.9	19%
Macroalgae	13	186	5.3	14.3	5%
Soft coral	1	20	-	20	-
Sand/rubble	36	3042	77.8	84.5	76%

AFTER THE FLOOD

Problems obtaining line transect information on this dive.

SITE 7 (Bald Rock) after the flood 0.5m above LWD

	n	E	SD	mean	%
Live hard coral	11	218	10.4	19.7	14%
Bleached coral	10	232	14.5	23.2	16%
Dead coral	10	187	8.7	18.5	12%
Turf algae	19	860	24.0	45.2	57%
Soft coral	1	3	0	3	1%

At LWD

	n	E	SD	mean	%
Live hard coral	15	340	15.1	24.4	23%
Bleached coral	4	156	0	46.3	10%
Dead coral	10	370	18.5	40.6	25%
Turf algae	15	576	23.8	37.3	38%
Soft coral	2	58	2.8	29.0	4%

At 0.2m below LWD

	n	E	SD	mean	%
Live hard coral	15	427	18.2	28.5	28%
Bleached coral	3	102	17.6	34.0	7%
Dead coral	15	552	23.0	36.8	37%
Turf algae	9	321	11.5	35.6	21%
Soft coral	5	98	10.1	19.6	7%

SITE 8 (Barron Island) after the floods, new permanent sites.

At 0.2m above LWD

	n	E	SD	mean	%
Live hard coral	25	675	24.5	27.0	34%
Dead coral	14	724	52.9	51.8	36%
Turf algae	10	313	29.8	31.3	16%
Bleached coral	3	47	8.9	15.6	2%
Sand/rubble	4	241	40.5	60.3	12%

At LWD

	n	E	SD	mean	%
Live hard coral	24	683	28.8	28.5	34%
Dead coral	22	824	29.8	37.5	41%
Bleached coral	4	61	11.5	15.3	3%
Turf algae	8	358	38.2	44.8	18%
Sand/rubble	1	26	-	26	1%
Others	3	48	8.6	16	3%

At 0.3m below LWD

	n	E	SD	mean	%
Live hard coral	19	775	37.4	40.8	39%
Dead coral	21	964	35.9	45.9	48%
Bleached coral	2	88	41.0	44.0	5%
Turf algae	6	145	10.0	24.2	7%
Others	4	28	2.3	7	1%

At 2.5m below LWD

	n	E	SD	mean	%
Live hard coral	26	1157	40.6	44.5	58%
Dead coral	10	524	31.6	52.4	26%
Turf algae	6	92	11.6	15.3	5%
Soft coral	2	171	82.7	85.5	8%
Sand/rubble	2	56	8.5	28.0	3%

At 3.0m below LWD

	n	E	SD	mean	%
Live hard coral	36	1383	44.8	38.4	69%
Turf algae	11	251	18.0	22.8	13%

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Soft coral	12	111	5.3	9.3	5%
Rubble	7	255	30.8	36.4	13%

Appendix 2. Species List (1989).

Pocilloporidae

Pocillopora damicornis
Stylophora pistillata

Acroporidae

A. tenuis
A. loripes
A. cytherea
A. glauca
A. hyacinthus
A. nasuta
A. nana
A. nobilis
A. sarmentosa
A. millepora
A. solitaryensis
A. pulchra
A. aspera
A. microphthalma

Montipora aequituberculata
Montipora venosa
Montipora efflorescens
Montipora tuberculosa

Poritidae

P. australiensis
P. lutea/lobata
Goniopora spp.

Faviidae

Favia rotumana
Favia lizardensis
Favia speciosa
Favites halicora
Favites flexuosa
Favites complanata
Goniastrea australiensis
Goniastrea favulus
Platygyra daedalea
Oulophyllia crista
Cyphastrea chalcidicum
Cyphastrea serailia
Leptastrea transversa

Dendrophylliidae

Turbinaria bifrons
Turbinaria stellulata
Turbinaria mesenterina

Other families

Galaxea fascicularis
Hydnophora exesa
Coscinaraea columna
Pavona venosa

Seriatopora hystrix
Palauastrea ramosa

A. formosa
A. cerealis
A. dendrum
A. microclados
A. selago
A. aculeus
A. valida
A. clathrata
A. divaricata
A. subulata
A. latistella
A. humilis
A. secale
A. samoensis

Montipora crassituberculata
Montipora angulata
Montipora hispida

P. annae
P. densa

Favia fava
Favia pallida
Favites russelli
Favites chinensis
Favites pentagona
Goniastrea palauensis
Goniastrea retiformis
Leptoria phrygia
Platygyra sinensis
Montastrea curta
Cyphastrea microphthalma
Leptastrea purpurea
Leptastrea inequalis

Turbinaria peltata
Turbinaria frondens
Turbinaria reniformis

Hydnophora pilosa
Psammocora contigua
Acanthastrea echinata
Fungia spp.