

APPENDIX

Appendix Table 1. Beaufort sea state and glare for each transect. See figure 1a-g for transect locations.

Glare scale: 0 - no glare

1 - 0#25%

2 - 25#50%

3 - >50%

	Beaufort			Glare					
	Min	Max	Mode	Min	North Max	Mode	Min	South Max	Mode
Southern GBR									
1	2	2	2	1	1	1	2	2	2
2	2	2	2	2	2	2	2	2	2
3	1	2	1	1	1	1	2	2	2
4	2	2	2	2	2	2	2	2	2
5				1	1	1	2	2	2
6	2	2	2	2	2	2	2	2	2
7	2	2	2	2	2	2	1	1	1
8	2	2	2	2	2	2	2	2	2
9	2	2	2	1	1	1	2	2	2
10	2	2	2	2	2	2	2	2	2
11	2	2	2	2	2	2	2	2	2
12	1	2	1	1	3	2	1	1	1
13	1	2	1	1	2	1	1	2	1
14	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1
16	2	2	2	2	2	2	1	1	1
17	2	2	2	2	3	2	2	2	2
18	3	3	3	3	3	3	1	1	1
19	3	3	3	3	3	3	2	2	2
20	3	3	3	3	3	3	1	1	1
21	3	3	3	3	3	3	3	3	3
22	2	2	2	2	2	2	1	2	1
23	3	3	3	3	3	3	1	1	1
24				2	2	2	1	1	1
25	1	3	1	1	3	2	1	3	1
26	1	1	1	1	1	1	1	1	1
27	1	3	1	1	3	1	1	1	1
28	1	1	1	1	1	1	1	1	1
29	3	3	3	3	3	3	3	3	3
30	3	3	3	3	3	3	3	3	3
31	3	3	3	2	2	2	3	3	3
32	3	3	3	3	3	3	3	3	3
33	3	3	3	2	2	2	3	3	3
34	2	3	2	2	2	2	2	3	2
35	3	3	3	1	1	1	2	2	2
36	3	3	3	3	3	3	2	3	2
37	1	1	1	2	2	2	2	2	2
38	1	1	1	2	2	2	2	2	2
39	1	2	1	1	1	1	1	1	1
40	1	1	1	1	1	1	2	2	2
41	1	1	1	1	3	1	1	2	1
42	2	2	2	0	1	0	1	1	1
43	2	3	2	1	1	1	2	2	2
44	2	3	2	2	3	2	2	3	3

	Beaufort				Glare				
	Min	Max	Mode	Min	North Max	Mode	Min	South Max	Mode
45	2	3	2	2	3	2	1	2	1
46	2	2	2	3	3	3	3	3	3
Shoalwater									
47	2.5	3	2.5	2	2	2	1	1	1
48	1	3	2	2	2	2	1	1	1
49	2	2.5	2	2	2	2	1	1	1
50	2	3	2	1	1	1	1	1	1
51	2	3	2	2	2	2	1	1	1
52	2.5	3	2.5	2	2	2	1	1	1
53	2	3	3	2	2	2	1	1	1
54	2.5	2.5	2.5	1	2	1	1	1	1
55	2	3	3	2	2	2	1	1	1
56	2.5	2.5	2.5	2	2	2	1	1	1
57	2.5	3	2.5	2	2	2	1	1	1
58	2	2.5	2.5	2	2	2	1	1	1
59	1	1	1	0	0	0	1	1	1
60	0.5	1	1	1	1	1	0	0	0
61	1	1	1	1	1	1	1	1	1
62	1	1	1	1	1	1	0	0	0
63				1	1	1	1	1	1
64	0	0	0	1	1	1	0	0	0
68	1	1	1	1	1	1	0	0	0
69	1	2	1						
70	2	3	2	1	1	1	0	1	0
71	2	2	2	1	1	1	0	0	0
72	1	2	2	1	1	1	0	1	0
73	1	1	1	0	0	0	0	0	0
74	1	2	2	1	1	1	0	0	0
75	1	1	1	1	1	1	0	0	0
76	1	2	1	1	1	1	1	1	1
77	2	2.5	2	0	1	0	1	1	1
78	2	2	2	1	1	1	1	1	1
80	1	1	1	0	0	0	0	0	0
81	1	1	1	1	1	1	0	0	0
82	2	3	3	1	1	1	0	0	0
83	1	3	1	1	1	1	0	1	0
84	2	3	3	1	1	1	0	0	0
85	2	2	2	1	1	1	0	0	0
86	2	4	2						
87	2	3	2	1	1	1	1	1	1
88	2	3	3	1	1	1	0	0	0
89	2	3	3	1	1	1	0	0	0
90	1	3	1	0	0	0	1	1	1
91	1	3	1	1	1	1	0	0	0
92	1	3	3	1	1	1	1	1	1
93	1	3	3	0	0	0	0	0	0
94	2	3	3	1	1	1	1	1	1
95	2	2	2	0	1	0	1	1	1
96	1	2	1	0	0	0	0	0	0
97	1	2	2	1	1	1	1	1	1
98	0	1	1	1	1	1	0	0	0
99	0.5	1	1	2	2	2	1	1	1
111	1	3	1						

	Beaufort			Min	Glare			Min	Max	Mode
	Min	Max	Mode		North Max	Mode	Min			
112a	0	1	0	1	1	1	0	0	0	0
112b	1	3	3	1	1	1	1	1	1	1
113a	2	3	3	1	2	1	0	1	0	0
113b	1	3	3	2	2	2	1	1	1	1
Whitsunday										
110	1	1	1	1	1	1	0	0	0	0
111	1	1	1	0	0	0	3	3	3	3
112	1	1	1	0	1	0	0	1	0	0
113	1	1	1	1	1	1	2	2	2	2
114	1	1	1	1	1	1	1	1	1	1
115	1	1	1	1	1	1	1	1	1	1
116	1	1	1	1	1	1	1	1	1	1
117	1	1	1	1	1	1	2	2	2	2
118	1	1	1	1	2	1	1	2	1	1
125	1	1	1	2	2	2	2	2	2	2
126	1	1	1	2	3	2	1	1	1	1
127	1	1	1	2	3	2	3	3	3	3
128	1	1	1	1	3	1	2	2	2	2
129	1	1	1	2	3	2	3	3	3	3
130	1	1	1	2	2	2	2	2	2	2
131	1	1	1	2	3	2	3	3	3	3
132	1	1	1	2	2	2	1	3	1	1
133	1	1	1	2	2	2	1	2	1	1
134	1	1	1	1	2	1	1	2	1	1
135	3	3	3	1	1	1	2	2	2	2
136	3	3	3	2	3	2	1	1	1	1
137	3	3	3	1	1	1	2	2	2	2
138	3	3	3	3	3	3	2	2	2	2
139	3	3	3	2	2	2	2	2	2	2
140	3	3	3	2	2	2	2	2	2	2
141	3	3	3	2	2	2	3	3	3	3
142	3	3	3	1	1	1	2	2	2	2
143	2	3	2	1	2	1	3	3	3	3
144	2	2	2	1	1	1	3	3	3	3
145	2	3	2	3	3	3	1	1	1	1
146	2	2	2	1	1	1	3	3	3	3
147	1	1	1	2	2	2	1	1	1	1
148	1	1	1	0	1	0	0	3	0	0
149	1	1	1	1	1	1	1	1	1	1
150	0	1	0	0	1	0	0	2	2	2
151	0	1	0	0	0	0	0	0	0	0
152	0	2	0	1	1	1	1	2	1	1
153	0	1	1	2	2	2	1	1	1	1
154	1	1	1	1	1	1	2	2	2	2
155	1	1	1	1	2	1	1	1	1	1
156	1	1	1	1	1	1	2	2	2	2
157	1	3	1	0	0	0	1	1	1	1
158	1	2	1	0	0	0	2	2	2	2
161	1	2	1	1	1	1	1	1	1	1
162	1	2	1	0	0	0	2	2	2	2
163	2	2	2	2	2	2	1	1	1	1
164	1	1	1	0	0	0	1	1	1	1
165	1	2	1	0	0	0	2	2	2	2

	Beaufort			Min	Glare			Min	Max	Mode
	Min	Max	Mode		North Max	Mode	Min			
166	2	3	2	1	1	1	2	2	2	2
167	1	1	1	1	1	1	1	1	1	1
168	2	2	2	1	1	1	2	2	2	2
169	1	2	1	1	1	1	1	1	1	1
177	1	2	1	0	0	0	1	1	1	1
178	2	3	2	1	1	1	1	1	1	1
179	2	2	2	1	1	1	2	2	2	2
180	1	2	1	1	1	1	1	1	1	1
181	1	1	1	2	2	2	1	1	1	1
182	2	2	2	1	1	1	2	2	2	2
183	1	1	1	0	1	0	0	1	0	0
184	1	1	1	1	1	1	2	2	2	2
185	2	2	2	1	1	1	1	1	1	1
186	1	1	1	2	2	2	1	1	1	1
187	1	1	1	1	1	1	1	3	1	1
188	1	2	1	1	1	1	0	0	0	0
189	2	2	2	1	1	1	2	2	2	2
190	2	2	2	2	2	2	1	1	1	1
191	3	3	3	1	1	1	2	2	2	2
192	1	3	1	2	2	2	1	1	1	1
193	2	3	2	1	1	1	1	1	1	1
194				0	0	0	0	0	0	0
195	1	1	1	0	1	0	0	1	0	0
196	1	1	1	0	0	0	0	0	0	0
197	2	2	2	0	0	0	0	1	0	0
198	2	2	2	0	0	0	0	0	0	0
199	2	2	2	1	1	1	2	2	2	2
200	2	2	2	0	0	0	1	1	1	1
201	2	2	2	0	0	0	0	0	0	0
202	2	2	2	0	0	0	0	0	0	0
203	2	2	2	0	0	0	1	1	1	1
204	2	2	2	0	0	0	1	1	1	1
205	2	2	2	0	0	0	0	0	0	0
1390	3	3	3	3	3	3	2	2	2	2
1400	3	3	3	3	3	3	2	2	2	2
1410	3	3	3	3	3	3	1	1	1	1
1420	3	3	3	3	3	3	2	2	2	2
1430	2	2	2	3	3	3	1	1	1	1
1690	1	2	1	0	0	0	1	1	1	1
1770				1	1	1	0	0	0	0
1780				1	1	1	1	1	1	1
1790	2	2	2	1	2	1	1	2	1	1
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Northern										
206	1	1	1	1	1	1	1	1	1	1
207	1	2	1	1	1	1	0.5	0.5	0.5	0.5
208	2	3	2	1	1	1	1	1	1	1
209	3	3	3	2	2	2	1	1	1	1
210	2	3	2	1	1	1	1	1	1	1
211	1	3	1	1.5	1.5	1.5	2	2	2	2
212	2	3	2	1	1	1	1	2	1	1
213	2.5	3	2.5	1	1	1	1	1	1	1
214	2.5	3	2.5	2	2	2	1	1	1	1
215	2	3	3	1	1	1	1	1	1	1

	Beaufort			Glare					
	Min	Max	Mode	Min	North Max	Mode	Min	South Max	Mode
216	2.5	3	2.5	1	1	1	1	1	1
217	2	3	3	1	1	1	1	1	1
218	2.5	2.5	2.5	1	1	1	1	1	1
219	2.5	2.5	2.5	1	1	1	0	0	0
220	2.5	2.5	2.5	1	1	1	1.5	1.5	1.5
221	2	2.5	2	1	1	1	1	1	1
222	2	2	2	1	1	1	2	2	2
223	1	1	1	0	0	0	0	0	0
224	0	2	1	1	1	1	1	1	1
225	1	1	1	0	0	0	0	0	0
226	1	1	1	0	0	0	0	0	0
227	0.5	2	1	0	0	0	0	0	0
228	1	1	1	0	0	0	0	0	0
229	2	2	2	0	0	0	0	0	0
230	2	2	2	0	0	0	0.5	0.5	0.5
231	1.5	2	2	0	0	0	0	0	0
232	2	2	2	0	0	0	0	0	0
233	0	1	0	1	1	1	0	0	0
234	0	1	1	0	0	0	0	0	0
235	1	2	1	0	1	0	0	0.5	0
236	2	3	2	1	1	1	1	1	1
237	0.5	2	2	1	1	1	1	1	1
238	2	3	2	1	1	1	1	1	1
239	2	2	2	1	1	1	1	1	1
240	2	2	2	0.5	0.5	0.5	1	1	1
241	1	3	2	0.5	0.5	0.5	1	1	1
242	1	2	1	0	1	1	0.5	0.5	0.5
243	1	3	1	1	1	1	1	1	1
244	1	2	2	1	1	1	1	1	1
245	1	2	2	0	0	0	0.5	0.5	0.5
246	0	2	2	1	1	1	1	1	1
247	2	2	2	0	0	0	0	0	0
248	2	3	2	1	1	1	0.5	0.5	0.5
249	2	2.5	2	0	0	0	0	0	0
250	2	2.5	2	0	0	0	1	1	1
251	2	3	2	0	1	0	0	1	0
252	2	3	3	1	1	1	0.5	0.5	0.5
253	3	3	3	0	0	0	0	0	0
254	1.5	3	1.5	2	2	2	1	1	1
255	2	4	2.5	1	1	1	2	2	2
256	2	2.5	2	1	1	1	1	1	1
257	1	3	3	2	2	2	2	2	2
258	1	2.5	2.5	0	0	0	0	0	0
259	0	1	1	1	1	1	0	0	0
260	0	1.5	1	1	1	1	0	1	0
261	0	2	0	1	1	1	0	0	0
262	0.5	1.5	0.5	1	1	1	1	1	1
263	0	3	2	0	2	1	0	2	1
264	2	3	2.5	1	1	1	0	0	0
265	1	3	1	0	0	0	1	1	1
266	0.5	2	2	1	2	1	1	1	1
267	0.5	2	0.5	1	2	1	1	2	1
268	1	3	1	1	1	1	1	1	1
269	1	2	1	1	1	1	1	1	1

	Beaufort			Min	Glare			Min	Max	Mode
	Min	Max	Mode		North Max	Mode	Min			
270	0	1	0	0	0	0	0	0	0	0
271	0.5	2	1	1	1	1	1	1	1	1
272	0	1	1	0	0	0	0	0	0	0
273	1	3	1	1	2	1	1	2	1	1
274	0.5	2	1	1	1	1	1	1	1	1
275	0	1	0.5	1	1	1	1	1	1	1
276	0	1	0							
277	0	0.5	0	1	1	1	1	1	1	1
278	0	0.5	0	0	1	0	0	1	0	0
279	0	1	0	2	2	2	2	2	2	2
280	0.5	0.5	0.5	1	1	1	1	1	1	1
281	0.5	2	0.5	1	1	1	1	1	1	1
282	0	0	0	0	0	0	0	0	0	0
283	0	1	0	0	0	0	0	0	0	0
284	0	2	0	1	1	1	0	0	0	0
285	0	1	1	0	0	0	0	0	0	0
286	0	1	0	0	0	0	0	0	0	0
287	0	1	0	0	0	0	0	0	0	0
288	0	1.5	0	0	0	0	0	0	0	0
289	0	1.5	0	0	0	0	0	0	0	0
290	0	1.5	1	0	0	0	0	0	0	0
291	0.5	1.5	1.5	0	0	0	1	1	1	1
292	0.5	2	1.5	0	0	0	1	1	1	1
293	0	2	1.5	1	1	1	1	1	1	1
294	0.5	2	1	0	0	0	1	1	1	1
295	2	3	2	2	2	2	1	1	1	1
296	1	4	1	1	2	1	1	2	1	1
297	0	4	3	1	1	1	1	1	1	1
298	1	3	1	1	1	1	1	1	1	1
299	2	4	3	1	2	1	1	1.5	1	1

Hervey Bay

5				1	2	1	1	1	1
6				1	1	1	1	1	1
7	1	1	1	2	2	2	1	1	1
8	1	1	1	1	1	1	1	1	1
9	1	1	1	2	2	2	1	1	1
10	1	1	1	2	2	2	1	1	1
11				1	1	1	1	1	1
12	1	1	1	1	2	1	1	1	1
13	1	1	1	1	1	1	1	1	1
14				2	2	2	1	1	1
15				1	2	1	1	1	1
16	1	1	1	1	1	1	1	1	1
17				1	2	2	1	2	1
18				2	2	2	1	1	1
19				2	2	2	1	1	1
20				1	2	1	1	1	1
21				1	2	1	1	1	1
22	1	1	1	1	2	1	1	1	1
23				1	1	1	1	1	1
24				1	1	1	1	1	1
25				1	1	1	1	1	1
26	1	1	1	1	2	1	1	2	1

	Beaufort			Min	Glare				
	Min	Max	Mode		North Max	Mode	Min	South Max	Mode
27				1	1	1	1	1	1
28	0	0	0	0	0	0	1	1	1
29									
30	0	0	0	1	1	1	1	1	1
31	0	0	0	1	1	1	1	1	1
32				1	1	1	1	1	1
33				1	1	1	1	1	1
34	0	0	0	1	1	1	1	1	1
35	0	0	0	2	2	2	2	2	2
36	1	1	1	0	1	1	0	1	0
37	1	1	1	0	3	0	1	2	1
38	1	1	1	1	1	1	0	1	1
39				0	1	0	1	1	1
40				1	1	1	1	1	1
41	1	1	1	1	2	1	1	1	1
42	1	1	1	1	1	1	1	1	1
43	0	1	0	0	1	1	1	1	1
44	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1
46	1	1	1	1	2	2	1	1	1
47				1	1	1	1	1	1
48	1	1	1	2	2	2	1	1	1
49				1	2	1	2	2	2
50	1	3	1	1	2	1	1	1	1
51	1	3	2	2	2	2	1	2	2
52	1	2	1	1	2	1	1	1	1
53	1	2	1	1	1	1	2	2	2
54	1	1	1	1	1	1	1	2	1
55				1	2	1	1	1	1
56				1	1	1	2	2	2
57	2	2	2	1	2	1	1	2	1
58	2	2	2	1	1	1	2	2	2
59	2	2	2	2	2	2	2	2	2
601	3	4	3	3	3	3	3	3	3
602	3	3	3	3	3	3	3	3	3
603	3	3	3	3	3	3	3	3	3
604	3	3	3	3	3	3	3	3	3
605	3	3	3	3	3	3	3	3	3
606	3	3	3	3	3	3	3	3	3
607	3	3	3	3	3	3	3	3	3
608	3	3	3	3	3	3	3	3	3
609	3	3	3	3	3	3	3	3	3
610	3	3	3	3	3	3	3	3	3
611	3	3	3	3	3	3	3	3	3
612	3	3	3	3	3	3	3	3	3
613	3	3	3	3	3	3	3	3	3
614	3	3	3	3	3	3	3	3	3
615	3	3	3	3	3	3	3	3	3
616	3	3	3	3	3	3	3	3	3
617	3	3	3	3	3	3	3	3	3
618	2	2	2	3	3	3	3	3	3
619	2	2	2	3	3	3	3	3	3
620	2	2	2	3	3	3	3	3	3

	Beaufort				Glare				
	Min	Max	Mode	Min	North Max	Mode	Min	South Max	Mode
Moreton Bay									
1	0	0	0	1	1	1	1	1	1
2	0	0	0	0	0	0	1	1	1
3	0	0	0	1	1	1	1	1	1
4	0	0	0	0	0	0	1	1	1
5	0	0	0	1	1	1	1	1	1
6	0	0	0	0	0	0	1	1	1
7	0	0	0	1	1	1	1	1	1
8	0	0	0	1	1	1	1	1	1
9	0	0	0	1	1	1	1	1	1
10	0	0	0	1	1	1	2	2	2
11	0	1	0	1	1	1	0	2	0
12	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	2	1
36	0	0	0	0	0	0	1	1	1
37	1	1	1	1	1	1	1	1	1
38	1	1	1	1	1	1	1	1	1
39	1	1	1	1	1	1	1	1	1
40	1	2	1	1	2	2	1	2	2
41	2	2	2	1	2	1	1	1	1
42	1	2	2	1	2	1	1	2	1
43	1	3	1	1	2	1	1	2	1
44	2	2	2	1	3	1	1	3	3
45	1	1	1	2	3	2	1	3	1
46	2	2	2	2	3	2	1	3	3
47	2	2	2	3	3	3	3	3	3
48	1	3	1	2	3	3	3	3	3
49	2	2	2	2	3	2	3	3	3
50	2	2	2	2	3	2	2	2	2
51	2	2	2	2	3	2	1	3	1
52	1	1	1	2	2	2	2	2	2
53	1	1	1	1	1	1	1	1	1

Appendix Table 2. Raw data for sightings of dugong groups for each transect in each block used for population estimates.

Block, Transect Number	Adjusted transect height	Transect length (sea only)	Transect area (km ²)	# groups port	# groups starboard
Southern					
Section GBR					
S1					
1	450	22.2	8.9	0	0
2	450	22.9	9.2	0	0
3	450	22.9	9.2	0	0
4	450	22.3	8.9	0	0
5	450	22.2	8.9	0	0
6	450	22.3	8.9	0	0
7	450	22.1	8.8	0	0
8	450	23.7	9.5	0	0
9	450	27.0	10.8	0	0
10	450	22.5	9.0	0	0
11	450	22.2	8.9	0	0
12	450	24.7	9.9	0	0
13	450	29.5	11.8	0	0
17	450	26.1	10.4	0	0
S2					
23	450	22.2	8.9	0	0
25	450	22.2	8.9	0	0
27	450	21.3	8.5	0	0
29	450	22.0	8.8	0	0
30	450	22.5	9.0	0	0
31	450	22.5	9.0	0	0
32	450	22.5	9.0	0	0
33	450	22.5	9.0	0	0
34	450	27.0	10.8	0	0
S3					
11	450	10.2	4.1	0	0
12	450	18.5	7.4	1	0
13	450	14.8	5.9	0	0
14	450	17.0	6.8	1	0
15	450	13.7	5.5	0	0
16	450	21.5	8.6	0	0
17	450	22.2	8.9	0	0
18	450	20.4	8.2	0	0
19	450	21.7	8.7	0	0
20	450	26.7	10.7	0	0
21	450	27.2	10.9	0	0
22	450	9.9	4.0	0	0
23	450	9.3	3.7	0	0
24	450	18.5	7.4	1	0
25	450	16.7	6.7	0	0
26	450	5.0	2.0	0	0
27	450	1.9	0.8	0	0
28	450	1.3	0.5	0	0
34	450	8.0	3.2	0	0
35	450	14.4	5.8	0	0
36	450	14.8	5.9	0	0
37	450	15.9	6.4	0	0

Block, Transect Number	Adjusted transect height	Transect length (sea only)	Transect area (km ²)	# groups port	# groups starboard
38	450	18.3	7.3	0	0
39	450	22.1	8.8	0	0
40	450	14.5	5.8	0	0
41	450	14.1	5.6	0	0
42	450	18.5	7.4	0	0
S4					
43	450	40.3	16.1	0	0
44	450	39.0	15.6	0	0
45	450	32.9	13.2	0	0
46	450	28.6	11.4	0	0
47	450	23.1	9.2	0	0
48	450	23.7	9.5	0	0
49	450	24.4	9.8	0	0
50	450	22.2	8.9	0	0
51	450	21.9	8.8	0	0
52	450	22.0	8.8	0	0
53	450	22.0	8.8	0	0
54	450	22.0	8.8	0	0
55	450	22.2	8.9	0	0
56	450	22.2	8.9	0	0
57	450	22.2	8.9	0	0
58	450	22.2	8.9	0	0
59	450	22.5	9.0	0	0
60	450	22.1	8.8	0	0
61	450	21.8	8.7	0	0
62	450	27.5	11.0	0	0
620	450	37.3	14.9	0	0
64	450	22.0	8.8	0	0
70	450	29.5	11.8	0	0
71	450	22.2	8.9	0	0
72	450	22.5	9.0	0	0
73	450	2.3	0.9	0	0
74	450	1.9	0.8	0	0
75	450	23.6	9.4	0	0
76	450	31.5	12.6	0	0
77	450	22.6	9.0	0	0
78	450	22.5	9.0	0	0
98	450	23.3	9.3	0	0
S5					
68	450	2.1	0.8	0	0
79	450	3.6	1.4	0	0
80	450	1.1	0.4	0	0
81	450	5.0	2.0	1	0
82	450	8.2	3.3	2	0
83	450	18.1	7.2	0	0
84	450	15.3	6.1	1	2
85	450	17.7	7.1	0	0
86	450	19.3	7.7	0	1
87	450	23.8	9.5	0	0
88	450	26.7	10.7	0	0
89	450	31.6	12.6	0	3
90	450	35.0	14.0	0	0
91	450	40.6	16.2	1	0

Block, Transect Number	Adjusted transect height	Transect length (sea only)	Transect area (km ²)	# groups port	# groups starboard
92	450	32.8	13.1	1	0
93	450	35.7	14.3	0	3
94	450	34.9	14.0	0	1
95	450	36.1	14.4	0	0
96	450	39.5	15.8	0	0
97	450	41.2	16.5	0	0
98	450	39.0	15.6	0	0
64	450	8.1	3.2	4	0
67	450	4.4	1.8	0	0
69	450	10.9	4.4	1	2
S6A					
125	450	6.3	2.5	0	0
126	450	13.9	5.6	0	0
127	450	25.2	10.1	0	0
128	450	25.3	10.1	0	0
129	450	20.8	8.3	0	0
130	450	22.2	8.9	0	0
S6B					
110	450	10.6	4.2	0	0
111	450	11.2	4.5	0	0
112	450	12.8	5.1	0	0
113	450	15.0	6.0	0	0
114	450	15.1	6.1	0	0
115	450	17.1	6.8	0	0
116	450	19.5	7.8	0	0
117	450	20.9	8.4	0	0
118	450	21.2	8.5	0	0
S6C					
99	450	56.0	22.4	0	0
110	450	42.3	16.9	0	0
111	450	47.3	18.9	1	0
112	450	105.8	42.3	0	0
113	450	97.8	39.1	0	0
S7					
131	450	22.4	8.9	0	0
132	450	22.4	8.9	0	0
133	450	22.3	8.9	0	0
134	450	22.4	8.9	0	0
135	450	22.4	8.9	0	0
136	450	22.5	9.0	0	0
137	450	22.1	8.8	0	0
138	450	22.6	9.0	0	0
139	450	22.9	9.2	0	0
S8					
147	450	22.0	8.8	0	0
146	450	23.0	9.2	0	0
145	455	22.9	9.3	0	0
144	450	20.2	8.1	0	0
143	450	22.1	8.8	0	0
142	450	27.7	11.1	0	0
141	450	23.0	9.2	0	0
140	450	23.3	9.3	0	0
1390	450	20.4	8.1	0	0

Block, Transect Number	Adjusted transect height	Transect length (sea only)	Transect area (km²)	# groups port	# groups starboard
1400	450	23.5	9.4	0	0
1410	450	17.7	7.1	0	0
1420	450	21.1	8.4	0	0
1430	450	23.3	9.3	0	1
Central Section GBR					
C1					
148	450	39.6	15.8	0	0
149	450	38.6	15.4	1	0
150	450	3.5	1.4	0	0
151	450	9.7	3.9	0	0
152	450	10.6	4.2	0	0
153	450	9.1	3.6	0	0
154	450	6.2	2.5	0	0
155	450	3.2	1.3	0	0
156	450	12.1	4.8	0	0
C2 - Not surveyed					
C3					
157	450	22.7	9.1	0	0
158	450	17.3	6.9	0	0
161	450	19.4	7.8	0	0
162	450	20.6	8.2	0	0
163	450	23.4	9.4	0	0
164	450	19.5	7.8	0	0
165	450	29.2	11.7	0	0
166	450	20.9	8.4	0	0
167	450	25.1	10.0	0	0
168	450	8.5	3.4	0	0
169	450	26.7	10.7	0	0
177	450	14.7	5.9	0	0
178	450	30.9	12.4	0	0
179	450	39.9	16.0	0	0
180	450	43.2	17.3	0	0
181	450	34.9	14.0	0	0
182	450	35.5	14.2	0	0
183	450	38.8	15.5	0	0
184	450	5.1	2.0	0	0
185	450	38.4	15.4	0	0
186	450	49.9	20.0	0	1
187	450	46.1	18.4	3	0
188	450	22.7	9.1	0	0
1690	450	18.0	7.2	0	0
1770	450	21.5	8.6	0	0
1780	450	29.2	11.7	0	0
1790	450	37.0	14.8	0	1
C4					
189	450	13.0	5.2	0	0
190	450	18.5	7.4	0	0
191	450	17.5	7.0	0	0
192	450	18.4	7.4	0	0
193	450	21.0	8.4	1	3
194	450	24.7	9.9	1	1
195	450	21.4	8.6	0	0

Block, Transect Number	Adjusted transect height	Transect length (sea only)	Transect area (km²)	# groups port	# groups starboard
196	450	20.1	8.0	0	0
197	450	23.4	9.4	0	0
198	450	20.3	8.1	0	1
C5					
199	450	22.1	8.8	0	1
200	450	9.6	3.8	0	0
201	450	46.0	18.4	1	0
202	450	20.8	8.3	0	0
203	450	20.4	8.2	0	0
204	450	20.6	8.2	0	0
205	450	21.3	8.5	0	0
213	450	21.6	8.6	0	0
214	450	20.7	8.3	0	0
215	450	21.0	8.4	0	0
216	450	21.6	8.6	0	0
217	450	21.3	8.5	0	0
218	450	21.1	8.4	1	0
219	450	21.1	8.4	0	0
220	450	21.2	8.5	0	0
221	450	21.1	8.4	0	0
222	450	21.6	8.6	0	0
230	450	22.1	8.8	0	0
231	450	21.3	8.5	0	0
C6					
206	450	10.4	4.2	1	0
207	450	11.9	4.8	0	0
208	450	14.7	5.9	0	0
209	450	15.1	6.0	0	0
210	450	17.1	6.8	0	0
211	450	19.0	7.6	0	0
212	450	21.8	8.7	0	0
C7					
223	450	36.3	14.5	1	3
224	452.5	38.3	15.4	1	1
225	450	38.6	15.4	0	0
226	450	40.0	16.0	0	2
227	450	39.7	15.9	0	1
228	450	39.2	15.7	1	1
229	450	36.7	14.7	0	0
C8					
232	450	11.2	4.5	0	0
233	450	17.1	6.8	1	0
234	450	21.0	8.4	1	2
235	442.5	25.1	9.9	7	4
236	456.67	27.5	11.2	0	0
237	450	27.6	11.0	0	0
238	454	23.8	9.6	0	0
239	450	22.2	8.9	0	0
240	460	22.2	9.1	0	0
241	453.33	20.0	8.1	0	0
242	450	21.2	8.5	0	0
243	453.3	25.5	10.3	0	0
244	450	26.4	10.6	0	0

Block, Transect Number	Adjusted transect height	Transect length (sea only)	Transect area (km²)	# groups port	# groups starboard
C9					
245	450	41.2	16.5	0	0
246	450	44.2	17.7	0	0
247	453.3	47.0	18.9	0	0
248	450	50.3	20.1	0	0
249	450	49.4	19.8	0	0
250	453.3	50.8	20.5	0	0
251	450	49.0	19.6	0	0
252	457.5	46.2	18.8	0	0
253	450	22.2	8.9	0	0
254	450	22.2	8.9	0	0
255	450	22.2	8.9	0	0
256	450	22.2	8.9	0	0
257	450	22.2	8.9	0	0
258	464	32.0	13.2	2	0
259	450	31.7	12.7	0	0
260	450	18.7	7.5	0	0
261	450	17.8	7.1	0	0
262	453.3	15.5	6.2	1	0
263	450	20.4	8.2	1	0
264	445	22.2	8.8	0	0
265	453.3	22.2	8.9	0	0
266	450	22.2	8.9	0	0
267	450	22.2	8.9	0	0
268	453.3	22.2	8.9	0	0
269	450	22.2	8.9	0	0
270	450	22.2	8.9	0	0
271	450	22.2	8.9	1	1
272	455	22.8	9.2	1	1
C10					
273	445	39.6	15.7	0	0
274	450	38.6	15.4	0	2
275	450	3.5	1.4	2	0
276	450	9.7	3.9	0	1
277	450	10.6	4.2	2	3
278	450	9.1	3.6	1	1
279	450	6.2	2.5	1	0
280	450	3.2	1.3	0	0
281	450	12.1	4.8	1	0
282	450	12.1	4.8	10	9
C11					
283	450	45.1	18.0	5	0
284	450	43.7	17.5	1	2
285	450	30.8	12.3	0	0
286	450	22.2	8.9	0	0
287	450	22.2	8.9	0	0
288	450	22.2	8.9	0	0
289	450	22.2	8.9	0	0
290	460	22.2	9.1	0	0
291	450	22.2	8.9	0	0
292	450	22.2	8.9	0	0
293	460	22.2	9.1	0	0
294	450	22.2	8.9	0	0

Block, Transect Number	Adjusted transect height	Transect length (sea only)	Transect area (km²)	# groups port	# groups starboard
C12A					
295	450	21.2	8.5	1	0
296	450	39.9	15.9	0	0
297	450	47.3	18.9	0	0
298	450	22.4	9.0	0	0
299	450	22.4	9.0	0	0
Hervey Bay					
HB1					
5	442.442	3.2	1.3	0	0
6	441.7634	3.2	1.3	0	0
7	440.8951	2.9	1.1	0	0
8	440.3237	3.4	1.3	0	0
9	439.0313	5.5	2.1	0	0
10	437.9219	5.1	2.0	0	1
11	436.7768	3.4	1.3	0	0
12	435.9375	6.9	2.7	0	1
13	434.6049	8.5	3.3	0	1
14	433.4933	7.6	2.9	0	0
15	432.1652	10.5	4.0	1	2
16	430.8504	7.3	2.8	0	0
17	429.5625	7.1	2.7	0	0
18	428.529	8.2	3.1	3	1
19	427.2277	8.2	3.1	1	1
20	426.1228	6.3	2.4	0	0
21	425.2299	7.7	2.9	0	1
22	424.0737	6.2	2.3	0	0
23	422.8817	7.6	2.8	0	0
24	421.6964	9.5	3.5	0	0
25	420.0022	12.7	4.7	0	0
26	418.4107	11.7	4.4	0	0
27	445.173	10.2	4.0	0	0
28	443.3467	9.0	3.6	1	0
29	441.7729	11.0	4.3	1	3
30	439.787	13.2	5.2	0	1
31	437.7908	13.5	5.2	0	0
32	435.7121	14.7	5.7	0	0
33	433.5742	14.8	5.7	0	0
34	431.5419	14.5	5.6	1	0
HB2					
35	445.5722	21.7	8.6	0	1
36	442.2983	36.1	14.2	0	0
37	438.2734	39.0	15.2	2	1
38	434.4974	37.0	14.3	2	0
39	430.6033	41.0	15.7	5	0
40	426.3675	43.3	16.4	5	0
41	421.6844	46.8	17.6	6	0
42	416.4782	53.7	19.9	6	2
43	424.4199	58.1	21.9	3	3
44	417.7692	61.8	23.0	0	1
45	410.8017	64.7	23.6	1	0
46	403.422	67.5	24.2	0	1
HB3					
47	395.9471	37.5	13.2	0	0

Block, Transect Number	Adjusted transect height	Transect length (sea only)	Transect area (km ²)	# groups port	# groups starboard
48	386.1102	38.5	13.2	0	0
49	378.2875	38.5	12.9	2	0
50	446.5974	35.4	14.1	0	1
51	443.1839	31.8	12.5	0	0
52	439.612	28.9	11.3	0	0
53	431.7268	32.5	12.5	0	0
54	435.3313	25.1	9.7	0	0
HB4					
47	395.9471	35.7	12.6	1	0
48	386.1102	37.3	12.8	0	0
49	378.2875	36.7	12.3	1	1
50	446.5974	37.4	14.9	0	0
51	443.1839	38.9	15.3	0	0
52	439.612	42.2	16.5	0	0
53	431.7268	46.3	17.8	0	0
HB5					
55	428.7703	23.0	8.8	0	0
56	446.4535	25.4	10.1	1	0
57	445.2882	22.6	8.9	1	0
58	444.186	22.4	8.9	0	1
59	443.1362	22.9	9.0	2	0
HB6					
601	450	27.8	11.1	0	0
602	450	27.7	11.1	0	0
603	450	27.7	11.1	0	0
604	450	27.7	11.1	0	0
605	450	27.7	11.1	0	0
606	450	30.3	12.1	0	0
607	450	20.1	8.0	0	0
608	450	20.3	8.1	0	0
609	450	20.2	8.1	0	0
610	450	19.9	8.0	0	0
611	450	19.7	7.9	0	0
612	450	19.6	7.8	0	0
613	450	18.5	7.4	0	0
614	450	18.5	7.4	0	0
615	450	18.5	7.4	0	0
616	450	18.6	7.4	0	0
617	450	18.5	7.4	0	0
618	450	19.6	7.8	0	0
619	450	19.2	7.7	0	0
620	450	18.4	7.4	0	0
Moreton Bay					
MB1					
44	450	14.1	5.6	0	0
45	450	12.2	4.9	0	0
46	450	9.1	3.6	1	0
47	450	1.5	0.6	0	0
48	450	2.5	1.0	0	0
49	450	14.1	5.6	0	0
50	450	13.1	5.2	0	0
51	450	11.3	4.5	0	0
52	450	2.0	0.8	0	0

Block, Transect Number	Adjusted transect height	Transect length (sea only)	Transect area (km²)	# groups port	# groups starboard
53	450	2.6	1.0	0	0
MB3					
36	450	5.1	2.1	0	0
37	450	7.2	2.9	0	0
38	450	6.0	2.4	1	0
39	450	12.0	4.8	0	0
40	450	16.9	6.8	0	0
MB6					
1	450	4.9	2.0	1	0
2	450	4.1	1.6	0	0
3	450	5.7	2.3	0	0
4	450	7.7	3.1	0	0
5	450	9.8	3.9	0	0
6	450	10.5	4.2	1	1
7	450	10.0	4.0	0	0
8	450	10.8	4.3	1	1
9	450	9.9	3.9	2	2
10	450	10.1	4.0	1	0
11	450	12.9	5.1	0	0
12	450	12.5	5.0	0	0
13	450	15.0	6.0	0	0
14	450	13.6	5.5	0	0

Appendix Table 3. Raw data used for calculation of correction factors for dugongs for the survey.

a. Correction for perception bias

Blocks:lines	No. of groups of dugongs					
	Mid	Port Rear	Tandem	Mid	Starboard Rear	Tandem
<i>Northern leg</i>	6	2	27	4	8	26
Central Section 5:213–222, 230–231, 6, 7, 8: 232–235, 241, 9: 254– 256, 259–272, 10, 11, 12						
<i>Whitsunday leg</i>	3	2	2	4	1	4
Central section 1, 3, 4, 5:199–205, Southern section 6A, 6B, 7, 8						
<i>Shoalwater leg</i>	8	1	3	3	6	10
Southern section 4, 5, 6C						
<i>Southern SGBR</i> (Southern section 1, 2, 3), Hervey Bay (all blocks and lines), Moreton Bay (all blocks and lines)	13	3	16	6	7	11

b. Correction for availability bias

All sightings used	No. of dugongs in groups less than 10		
	Surface	Under	Total
<i>Northern leg</i>	52	45	97
Central section 6–12			
<i>Whitsunday leg</i>	24	18	42
Central section 1, 3, 4, 5:199–205 Southern section 6A, 6B, 7, 8			
<i>Northern/Whitsunday overlap</i>	55	45	100
Central section 5: 213– 222, 230–231			
<i>Shoalwater leg</i>	20	31	51
Southern section 4, 5, 6C			
<i>Southern SGBR</i> (Southern section 1, 2, 3), Hervey Bay (all blocks and lines), Moreton Bay (all blocks and lines)	37	78	115