

Identification and Optimization of Ecological Conservation

Priority Areas for Adaptation to Sea Level Rise in the Guangdong-Hong Kong-Macao Greater Bay Area

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Supplementary Table 1: Changes in habitat area for each species under the scenario of 0.5m sea-level rise

No.	Species	Scenario					
		2020		2050		Change	
		Number of grid cells	Area (km ²)	Number of grid cells	Area (km ²)	Area (km ²)	Change rate
	Amphibian	471	519.28	634	698.99	179.71	34.61%
1	<i>Hoplobatrachus rugulosus</i>	678	747.50	841	927.20	179.71	24.04%
2	<i>Kalophrynus interlineatus</i>	1,751	1,930.48	1,447	1,595.32	-335.16	-17.36%
3	<i>Paramesotriton hongkongensis</i>	1,825	2,012.06	3,433	3,784.88	1,772.82	88.11%
4	<i>Polypedates megacephalus</i>	1,504	1,658.16	1,351	1,489.48	-168.68	-10.17%
5	<i>Quasipaa exilispinosa</i>	1,742	1,920.56	2,485	2,739.71	819.16	42.65%
6	<i>Sylvirana guentheri</i>	1,203	1,326.31	1,054	1,162.04	-164.27	-12.39%
	Bird	347	382.57	422	465.26	82.69	21.61%
7	<i>Aerodramus brevirostris</i>	504	555.66	557	614.09	58.43	10.52%
8	<i>Corvus pectoralis</i>	2,059	2,270.05	3,065	3,379.16	1,109.12	48.86%
9	<i>Emberiza rustica</i>	703	775.06	2,336	2,575.44	1,800.38	232.29%
10	<i>Emberiza tristrami</i>	3,246	3,578.72	2,328	2,566.62	-1,012.10	-28.28%

11	<i>Halcyon pileata</i>	4,515	4,977.79	4,107	4,527.97	-449.82	-9.04%
12	<i>Himantopus himantopus</i>	5,013	5,526.83	6,469	7,132.07	1,605.24	29.04%
13	<i>Nycticorax nycticorax</i>	2,570	2,833.43	1,929	2,126.72	-706.70	-24.94%
14	<i>Platalea minor</i>	1,671	1,842.28	13,510	14,894.78	13,052.50	708.50%
15	<i>Rallina eurizonoides</i>	412	454.23	4,107	4,527.97	4,073.74	896.84%
16	<i>Recurvirostra avosetta</i>	1,980	2,182.95	778	857.75	-1,325.21	-60.71%
17	<i>Zapornia fusca</i>	1,557	1,716.59	4,017	4,428.74	2,712.15	158.00%
Mammal		3,089	3,405.62	2,731	3,010.93	-394.70	-11.59%
18	<i>Lutra lutra</i>	7,577	8,353.64	7,350	8,103.38	-250.27	-3.00%
19	<i>Manis pentadactyla</i>	3,077	3,392.39	3,726	4,107.92	715.52	21.09%
20	<i>Muntiacus vaginalis</i>	12,804	14,116.41	10,407	11,473.72	-2,642.69	-18.72%
21	<i>Prionailurus bengalensis</i>	5,048	5,565.42	3,308	3,647.07	-1,918.35	-34.47%
22	<i>Viverricula indica</i>	3,707	4,086.97	2,869	3,163.07	-923.90	-22.61%
Reptile		1,009	1,112.42	562	619.61	-492.82	-44.30%
23	<i>Bungarus fasciatus</i>	7,062	7,785.86	5,361	5,910.50	-1,875.35	-24.09%
24	<i>Calotes versicolor</i>	3,452	3,805.83	2,122	2,339.51	-1,466.33	-38.53%
25	<i>Naja atra</i>	17,542	19,340.06	19,121	21,080.90	1,740.85	9.00%
26	<i>Ophiophagus hannah</i>	1,404	1,547.91	2,491	2,746.33	1,198.42	77.42%
27	<i>Pelodiscus sinensis</i>	1,667	1,837.87	1,112	1,225.98	-611.89	-33.29%
28	<i>Physignathus cocincinus</i>	945	1,041.86	46,998	51,815.30	50,773.43	4873.33%