

Table S1. Land Use Transfer Matrix of the GBA in 2000 to 2005 (km²)

2005 2000	Cropland	Forest	Grassland	Water	Construction Land	Unutilized Land	2000 Total
Cropland	13,492.83	118.33	4.66	248.64	1251.06	0.10	15,115.62
Forest	74.28	30,019.27	17.31	29.81	476.83	0.34	30617.84
Grassland	5.10	56.30	1118.50	2.81	40.43	0.03	1223.16
Water	74.15	25.99	2.36	3679.83	209.40	0.03	3991.75
Construction Land	29.63	23.45	1.04	7.41	4416.17	0.08	4477.77
Unutilized Land	0.07	0.28	0.01	1.90	2.40	16.66	21.32
2005 Total	13,676.05	30,243.62	1143.87	3970.39	6396.29	17.24	55,447.46

Table S2. Land Use Transfer Matrix of the GBA in 2005 to 2010 (km²)

2010 2005	Cropland	Forest	Grassland	Water	Construction Land	Unutilized Land	2005 Total
Cropland	12,158.05	139.49	6.68	496.16	875.61	0.06	13,676.05
Forest	137.50	29,630.68	27.58	63.24	384.45	0.17	30,243.62
Grassland	8.99	42.54	1049.97	11.31	31.05	0.01	1143.87
Water	87.95	28.88	5.18	3583.81	264.48	0.09	3970.39
Construction Land	241.70	190.01	10.61	107.52	5846.43	0.02	6396.29
Unutilized Land	2.07	0.73	0.02	1.26	3.18	9.99	17.24
2010 Total	12,636.25	30,032.32	1100.03	4263.30	7405.21	10.35	55,447.46

Table S3. Land Use Transfer Matrix of the GBA in 2010 to 2015 (km²)

2015 2010	Cropland	Forest	Grassland	Water	Construction Land	Unutilized Land	2010 Total
Cropland	12,334.25	56.23	3.38	29.87	212.49	0.03	12,636.25
Forest	58.84	29,769.84	30.47	14.86	158.26	0.05	30,032.32
Grassland	3.52	15.23	1067.25	2.22	11.77	0.02	1100.03
Water	36.05	15.32	1.07	4143.48	67.37	0.02	4263.30
Construction Land	26.98	17.77	1.23	23.76	7335.40	0.07	7405.21
Unutilized Land	0.25	0.06	0.02	0.08	1.81	8.13	10.35
2015 Total	12,459.90	29,874.44	1103.42	4214.27	7787.11	8.32	55,447.46

Table S4. Land Use Transfer Matrix of the GBA in 2015 to 2018 (km²)

2018 2015	Cropland	Forest	Grassland	Water	Construc- tion Land	Unutilized Land	2015 Total
Cropland	11,579.64	338.85	22.55	108.14	410.48	0.25	12,459.90
Forest	338.21	29,048.14	186.77	83.28	217.85	0.19	29,874.44
Grassland	20.19	71.17	978.10	6.23	27.70	0.05	1103.42
Water	301.86	76.99	19.37	3653.01	162.90	0.14	4214.27
Construction Land	161.71	134.29	34.30	78.41	7378.15	0.25	7787.11
Unutilized Land	0.19	0.38	0.11	2.02	0.32	5.30	8.32
2018 Total	12,401.79	29,669.82	1241.20	3931.09	8197.40	6.16	55,447.46

Table S5. Distribution of unit area of each ecosystem service function by GBA from 2000 to 2018.

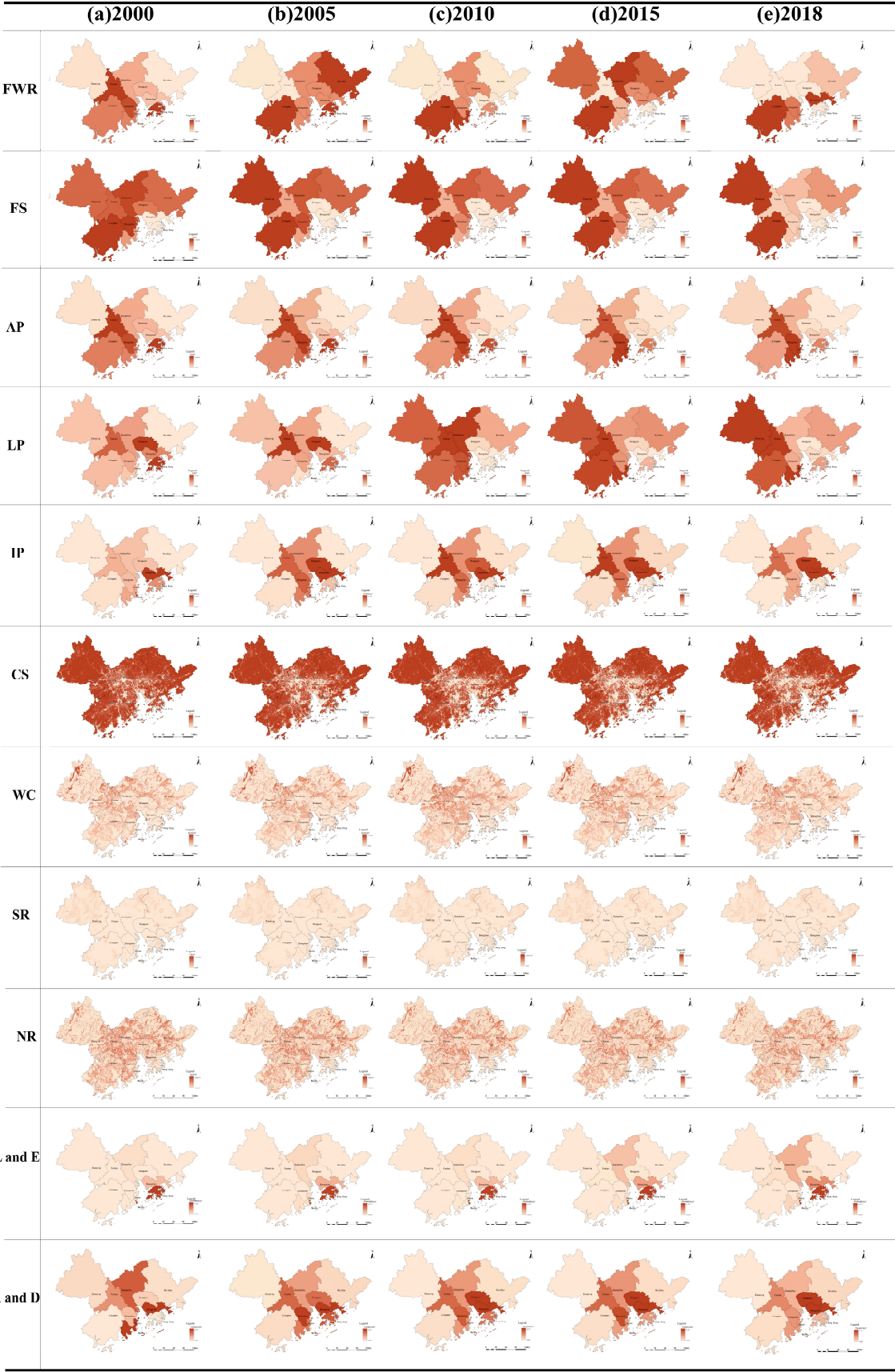


Table S6. Spatial Distribution of high and low values of ecosystem service provision by ecosystem, GBA 2000–2018

