

**Table S1.** Sensitivity Table. Table mapping each LULC class to data about the species' habitat preference and threat sensitivity in areas with that LULC. L\_aqu: Aquaculture; L\_far: Dryland and Paddy field; L\_res: Residential land; L\_ind: Industrial land.

LULC	NAME	HABITAT	L_aqu	L_far	L_res	L_ind
1	Estuary waters and sandbars	0.9	0.5	0.6	0.7	0.6
2	Tidal flat	0.9	0.4	0.6	0.7	0.7
3	Tidal creek	0.9	0.4	0.6	0.7	0.6
4	Intertidal salt marshes	1	0.4	0.5	0.7	0.6
5	Reed	1	0.3	0.5	0.7	0.6
6	Inland salt planting	1	0.3	0.5	0.7	0.6
7	Aquaculture	0.4	0.2	0.4	0.7	0.7
8	River	0.8	0.8	0.7	0.9	0.8
9	Inland water	0.8	0.8	0.7	0.9	0.8
10	Paddy field	0.3	0.3	0.3	0.6	0.5
11	Dryland	0.2	0.2	0.3	0.6	0.5
12	Residential land	0	0	0	0	0
13	Industrial land	0	0	0	0	0
14	Uncultivated land	0.7	0.4	0.6	0.7	0.7

**Table S2.** Threats Table. Table mapping each threat of interest to its properties and distribution maps.

MAX_DIST	WEIGHT	THREAT	DECAY
1	0.5	Aquaculture	linear
3	0.7	Farmland	linear
5	1	Residential land	exponential
5	1	Industrial land	exponential

**Table S3.** LULC types and the components of their carbon pools. C-above: amount of carbon stored in aboveground biomass; C-below: amount of carbon stored in belowground biomass; C-soil: amount of carbon stored in soil; C-dead: amount of carbon stored in dead organic matter.

Code	LULC types	C-above (Mg/hm <sup>2</sup> )	C-below (Mg/hm <sup>2</sup> )	C-soil (Mg/hm <sup>2</sup> )	C-dead (Mg/hm <sup>2</sup> )
1	Tidal flat	0.44	2.09	10.63	0.03
2	Tidal creek	0.44	2.09	10.63	0.03
3	Intertidal salt marshes	0.44	2.09	10.63	0.03
4	Reed	1.26	6.01	12.81	0.22
5	Inland salt planting	0.44	2.09	10.77	0.03
6	River	0	0	0	0
7	Inland water	0	0	0	0
8	Paddy field	0.69	3.29	11.48	0.05
9	Dryland	0.69	3.29	13.09	0.05
10	Residential land	0	0	9.75	0

11	Industrial land	0	0	6.14	0
12	Aquaculture	2.31	0	7.47	0
13	Uncultivated land	0	0	10.54	0
14	Estuary waters and sandbars	0	0	0	0

Note. In this study, the main indicators whose samples were analyzed were above-ground biomass and soil organic carbon content. Depending on the characteristics of the region, the carbon sink of salt marsh wetland plants was the focus of the study (e. g. reeds and alkali ponies). Plant samples were dried in an oven at 80°C to measure their above-ground biomass (C-above). It should be noted that tidal flats, tidal creeks, intertidal salt marshes and inland salt plants use the same aboveground biomass data in this paper, i.e., the same density of aboveground carbon pools. The numerical relationship between belowground biomass (C-below) and aboveground biomass was determined based on the root-to-shoot ratio R/S. The root to shoot ratio in this study area is about 4.76 according to the climate zone revision. *Clams* have a large share in aquaculture in this region, so the biomass carbon pool accounting parameters for aquaculture refer to *clams*. The sum of carbon absorbed by soft tissues and shells of shellfish is the biomass carbon stock. Soil carbon pools (C-soil) were determined based on soil organic carbon content and conversion factors. Soil organic carbon was measured using a total organic carbon analyzer (HT1300, Analytik Jena AG, Germany) after removal of soil calcium carbonate with hydrochloric acid. In addition, the carbon pool of dead organic matter (C-dead) was determined based on above-ground biomass and conversion factors. Based on the final carbon pool table and land use data, we obtained the distribution of carbon sequestration services in the region.

**Figure S1.** Remote sensing interpretation accuracy assessment. The "columns" are validation data, and the "rows" are interpretation results.

Classname	Aquaculture	Dryland	Estuarine Waters And Sandbar	Industrial Land	Inland Salt Plants	Inland Water	Intertidal Salt Marshes	Paddy Field	Reed	Residential Land	River	Tidal Creek	Tidal Flat	Uncultivated Land	Total	User's Accuracy
Aquaculture	22					1									23	95.65%
Dryland		3						1							4	75%
Estuarine Waters And Sandbar				11											11	100%
Industrial Land				12					1						12	100%
Inland Salt Plants					10									1	12	83.33%
Inland Water	1					11									12	91.67%
Intertidal Salt Marshes			1				13					2			16	81.25%
Paddy Field		2			2			80	2						86	93.02%
Reed			1		2		1	2	93						99	93.94%
Residential Land	1									17					18	94.44%
River									1		10				11	90.91%
Tidal Creek												1			1	100%
Tidal Flat	1						1						16		18	88.89%
Uncultivated Land						1								6	7	85.71%
<b>Total</b>	<b>25</b>	<b>5</b>	<b>13</b>	<b>12</b>	<b>14</b>	<b>13</b>	<b>15</b>	<b>83</b>	<b>97</b>	<b>17</b>	<b>10</b>	<b>3</b>	<b>16</b>	<b>7</b>	<b>330</b>	