

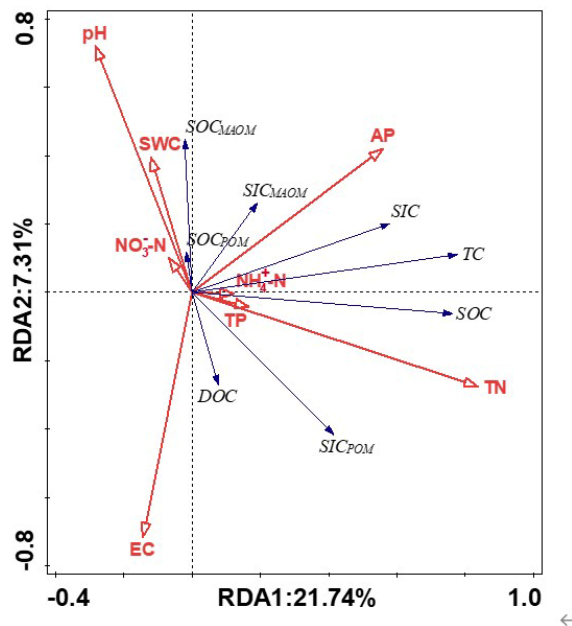
**Table S1** Summary of plant height, fresh weight, and coverage under different reclamation years

	Reclamation years		
	1st year	7th years	15th years
Plant height (cm)	72.72 ± 5.23 <sup>b</sup>	136.95 ± 3.29 <sup>a</sup>	78.70 ± 3.28 <sup>b</sup>
Dry weight (kg)	0.46 ± 0.07 <sup>b</sup>	0.69 ± 0.04 <sup>a</sup>	0.41 ± 0.04 <sup>b</sup>
Coverage (%)	54.08 ± 5.54 <sup>b</sup>	84.33 ± 2.01 <sup>a</sup>	76.75 ± 4.43 <sup>a</sup>

Values are mean ± standard error. Different lowercase letters of the same variable indicate significant differences at the level of  $p < 0.05$ .

**Table S2.** Redundancy analysis results for the soil carbon content of different components.

Sorting axis	Axis 1	Axis 2	Axis 3	Axis 4
Eigenvalues	0.22	0.07	0.02	0.01
Pseudo-canonical correlation	0.80	0.64	0.39	0.39
Explained variation (cumulative)/%	21.74	29.05	30.95	32.26
Explained fitted variation (cumulative)/%	65.61	97.68	93.41	97.36
Canonical eigenvalues	0.33			



**Figure S1.** The relative abundance for single factors influences the soil carbon content of different components. (TC, soil total carbon; SOC, soil organic carbon; SIC, soil inorganic carbon; DOC, soil dissolved organic carbon; SOC<sub>POM</sub>, SOC in POM fraction; SOC<sub>MAOM</sub>, SOC in MAOM fraction; SIC<sub>POM</sub>, SIC in POM fraction; SIC<sub>MAOM</sub>, SIC in MAOM fraction; TN, soil total nitrogen; NH<sub>4</sub><sup>+</sup>-N, soil soluble ammonium nitrogen; NO<sub>3</sub><sup>-</sup>-N, soil soluble nitrate nitrogen; TP, soil total phosphorus; AP, soil available phosphorus; SWC, soil water content; pH, soil pH; and EC, soil electrical conductivity).