

Table S3. Midpoint total soil carbon (TSC) storage and its monetary value by soil order and county for the state of Maryland (USA), based on the areas shown in Table 3 and the area-normalized midpoint monetary values in Table 4.

County/City	Total TSC Storage (kg), SC-CO ₂ (\$ = USD)	Degree of Weathering and Soil Development					
		Slight			Moderate	Strong	
		Entisols	Inceptisols	Histosols	Alfisols	Spodosols	Ultisols
		Total TSC Storage (kg), SC-CO ₂ (\$ = USD)					
Allegany	1.2 × 10 ¹⁰ \$2.0 × 10 ⁹	6.6 × 10 ⁸ \$1.1 × 10 ⁸	7.7 × 10 ⁹ \$1.3 × 10 ⁹	0 \$0	1.1 × 10 ⁹ \$1.9 × 10 ⁸	1.6 × 10 ⁴ \$2.8 × 10 ³	2.3 × 10 ⁹ \$4.0 × 10 ⁸
Anne Arundel	8.3 × 10 ⁹ \$1.4 × 10 ⁹	5.1 × 10 ⁸ \$8.6 × 10 ⁷	1.3 × 10 ⁹ \$2.2 × 10 ⁸	9.8 × 10 ⁸ \$1.6 × 10 ⁸	4.7 × 10 ⁸ \$8.0 × 10 ⁷	0 \$0	5.0 × 10 ⁹ \$8.5 × 10 ⁸
Baltimore City	1.1 × 10 ⁹ \$1.9 × 10 ⁸	3.3 × 10 ⁸ \$5.6 × 10 ⁷	9.7 × 10 ⁷ \$1.6 × 10 ⁷	1.2 × 10 ⁵ \$2.1 × 10 ⁴	3.5 × 10 ⁸ \$5.8 × 10 ⁷	0 \$0	3.5 × 10 ⁸ \$6.0 × 10 ⁷
Baltimore	1.3 × 10 ¹⁰ \$2.2 × 10 ⁹	2.3 × 10 ⁹ \$4.0 × 10 ⁸	2.3 × 10 ⁹ \$4.0 × 10 ⁸	9.9 × 10 ⁸ \$1.7 × 10 ⁸	1.6 × 10 ⁹ \$2.7 × 10 ⁸	0 \$0	5.8 × 10 ⁹ \$9.8 × 10 ⁸
Calvert	7.3 × 10 ⁹ \$1.2 × 10 ⁹	5.5 × 10 ⁸ \$9.3 × 10 ⁷	3.3 × 10 ⁹ \$5.6 × 10 ⁸	1.6 × 10 ⁹ \$2.7 × 10 ⁸	6.4 × 10 ⁷ \$1.1 × 10 ⁷	0 \$0	1.8 × 10 ⁹ \$3.0 × 10 ⁸
Caroline	5.4 × 10 ⁹ \$9.1 × 10 ⁸	6.5 × 10 ⁸ \$1.1 × 10 ⁸	2.9 × 10 ⁸ \$4.9 × 10 ⁷	4.6 × 10 ⁸ \$7.7 × 10 ⁷	3.7 × 10 ⁷ \$6.2 × 10 ⁶	0 \$0	3.9 × 10 ⁹ \$6.7 × 10 ⁸
Carroll	9.7 × 10 ⁹ \$1.6 × 10 ⁹	4.2 × 10 ⁸ \$7.2 × 10 ⁷	1.6 × 10 ⁹ \$2.7 × 10 ⁸	0 \$0	2.0 × 10 ⁹ \$3.4 × 10 ⁸	0 \$0	5.6 × 10 ⁹ \$9.5 × 10 ⁸
Cecil	5.8 × 10 ⁹ \$9.7 × 10 ⁸	5.9 × 10 ⁸ \$1.0 × 10 ⁸	4.0 × 10 ⁸ \$6.7 × 10 ⁷	0 \$0	5.9 × 10 ⁸ \$9.9 × 10 ⁷	0 \$0	4.2 × 10 ⁹ \$7.1 × 10 ⁸
Charles	9.9 × 10 ⁹ \$1.7 × 10 ⁹	1.1 × 10 ⁹ \$1.9 × 10 ⁸	1.7 × 10 ⁹ \$2.9 × 10 ⁸	0 \$0	4.6 × 10 ⁸ \$7.7 × 10 ⁷	0 \$0	6.6 × 10 ⁹ \$1.1 × 10 ⁹
Dorchester	3.0 × 10 ¹⁰ \$5.0 × 10 ⁹	1.5 × 10 ⁹ \$2.6 × 10 ⁸	7.3 × 10 ⁸ \$1.2 × 10 ⁸	1.9 × 10 ¹⁰ \$3.2 × 10 ⁹	2.7 × 10 ⁹ \$4.6 × 10 ⁸	0 \$0	5.9 × 10 ⁹ \$1.0 × 10 ⁹
Frederick	1.7 × 10 ¹⁰ \$2.9 × 10 ⁹	2.1 × 10 ⁸ \$3.5 × 10 ⁷	3.8 × 10 ⁹ \$6.4 × 10 ⁸	0 \$0	9.8 × 10 ⁹ \$1.7 × 10 ⁹	5.1 × 10 ⁷ \$8.5 × 10 ⁶	3.5 × 10 ⁹ \$5.9 × 10 ⁸
Garrett	1.7 × 10 ¹⁰ \$2.8 × 10 ⁹	4.7 × 10 ⁸ \$8.1 × 10 ⁷	7.7 × 10 ⁹ \$1.3 × 10 ⁹	0 \$0	1.1 × 10 ⁹ \$1.9 × 10 ⁸	6.8 × 10 ⁸ \$1.2 × 10 ⁸	6.6 × 10 ⁹ \$1.1 × 10 ⁹
Harford	1.2 × 10 ¹⁰ \$2.0 × 10 ⁹	5.7 × 10 ⁷ \$9.7 × 10 ⁶	3.8 × 10 ⁹ \$6.4 × 10 ⁸	3.0 × 10 ⁹ \$5.0 × 10 ⁸	1.6 × 10 ⁹ \$2.6 × 10 ⁸	0 \$0	3.6 × 10 ⁹ \$6.2 × 10 ⁸
Howard	5.1 × 10 ⁹ \$8.7 × 10 ⁸	4.2 × 10 ⁸ \$7.2 × 10 ⁷	1.7 × 10 ⁹ \$2.9 × 10 ⁸	0 \$0	2.0 × 10 ⁸ \$3.3 × 10 ⁷	0 \$0	2.8 × 10 ⁹ \$4.7 × 10 ⁸
Kent	6.0 × 10 ⁹ \$1.0 × 10 ⁹	4.6 × 10 ⁸ \$7.8 × 10 ⁷	2.2 × 10 ⁶ \$3.8 × 10 ⁵	1.2 × 10 ⁹ \$2.0 × 10 ⁸	0 \$0	0 \$0	4.3 × 10 ⁹ \$7.3 × 10 ⁸
Montgomery	1.1 × 10 ¹⁰ \$1.8 × 10 ⁹	8.2 × 10 ⁸ \$1.4 × 10 ⁸	2.0 × 10 ⁹ \$3.4 × 10 ⁸	0 \$0	9.7 × 10 ⁸ \$1.6 × 10 ⁸	0 \$0	6.9 × 10 ⁹ \$1.2 × 10 ⁹
Prince George's	9.1 × 10 ⁹ \$1.5 × 10 ⁹	1.5 × 10 ⁹ \$2.6 × 10 ⁸	1.6 × 10 ⁹ \$2.7 × 10 ⁸	2.8 × 10 ³ \$4.7 × 10 ²	5.3 × 10 ⁷ \$9.0 × 10 ⁶	0 \$0	5.9 × 10 ⁹ \$9.9 × 10 ⁸
Queen Anne's	8.5 × 10 ⁹ \$1.4 × 10 ⁹	6.3 × 10 ⁸ \$1.1 × 10 ⁸	1.1 × 10 ⁹ \$1.8 × 10 ⁸	1.0 × 10 ⁹ \$1.7 × 10 ⁸	7.9 × 10 ⁷ \$1.3 × 10 ⁷	0 \$0	5.7 × 10 ⁹ \$9.7 × 10 ⁸
Somerset	7.6 × 10 ⁹ \$1.3 × 10 ⁹	6.3 × 10 ⁸ \$1.1 × 10 ⁸	1.8 × 10 ⁷ \$3.1 × 10 ⁶	1.3 × 10 ⁹ \$2.2 × 10 ⁸	1.9 × 10 ⁹ \$3.1 × 10 ⁸	3.2 × 10 ⁸ \$5.3 × 10 ⁷	3.5 × 10 ⁹ \$5.9 × 10 ⁸
St. Mary's	5.9 × 10 ⁹ \$1.0 × 10 ⁹	5.6 × 10 ⁸ \$9.5 × 10 ⁷	7.7 × 10 ⁸ \$1.3 × 10 ⁸	0 \$0	0 \$0	0 \$0	4.6 × 10 ⁹ \$7.8 × 10 ⁸
Talbot	4.5 × 10 ⁹ \$7.5 × 10 ⁸	4.5 × 10 ⁷ \$7.6 × 10 ⁶	2.6 × 10 ⁵ \$4.4 × 10 ⁴	9.3 × 10 ⁸ \$1.6 × 10 ⁸	1.4 × 10 ⁸ \$2.3 × 10 ⁷	0 \$0	3.4 × 10 ⁹ \$5.7 × 10 ⁸
Washington	1.2 × 10 ¹⁰ \$2.1 × 10 ⁹	2.2 × 10 ⁸ \$3.8 × 10 ⁷	2.5 × 10 ⁹ \$4.2 × 10 ⁸	0 \$0	7.6 × 10 ⁹ \$1.3 × 10 ⁹	1.9 × 10 ⁶ \$3.3 × 10 ⁵	2.0 × 10 ⁹ \$3.3 × 10 ⁸
Wicomico	9.5 × 10 ⁹ \$1.6 × 10 ⁹	1.8 × 10 ⁹ \$3.1 × 10 ⁸	2.5 × 10 ⁹ \$4.1 × 10 ⁸	1.3 × 10 ⁹ \$2.3 × 10 ⁸	5.1 × 10 ⁸ \$8.6 × 10 ⁷	3.7 × 10 ⁸ \$6.2 × 10 ⁷	3.0 × 10 ⁹ \$5.1 × 10 ⁸
Worcester	1.8 × 10 ¹⁰ \$3.1 × 10 ⁹	2.9 × 10 ⁹ \$5.0 × 10 ⁸	2.9 × 10 ⁶ \$4.9 × 10 ⁵	8.1 × 10 ⁹ \$1.4 × 10 ⁹	0 \$0	1.7 × 10 ⁹ \$2.9 × 10 ⁸	5.4 × 10 ⁹ \$9.1 × 10 ⁸
Totals	4.9 × 10¹¹ \$4.1 × 10¹⁰	2.0 × 10¹⁰ \$3.3 × 10⁹	4.7 × 10¹⁰ \$7.9 × 10⁹	4.0 × 10¹⁰ \$6.7 × 10⁹	3.3 × 10¹⁰ \$5.6 × 10⁹	3.1 × 10⁹ \$5.3 × 10⁸	1.0 × 10¹¹ \$1.7 × 10¹⁰

Note: Entisols, Inceptisols, Alfisols, Spodosols, and Ultisols are mineral soils. Histosols are mostly organic soils. M = million = 10⁶; B = billion = 10⁹.