

Table S2. An overview of the accounting framework used by this study (adapted from Groshans et al. (2019) [21]) for the state of Illinois (USA).

OWNERSHIP (e.g., government, private, foreign, shared, single, etc.)

Time (e.g., information disclosure, etc.)	STOCKS / SOURCE ATTRIBUTION		FLOWS / LAND USE, CHANGE		VALUE	
	Biophysical Accounts (Science-Based)	Administrative Accounts (Boundary-Based)	Monetary Account(s)	Benefit(s)/ Damages	Total Value	
	Soil extent:	Administrative extent:	Ecosystem good(s) and service(s):	Sector:	Types of value (e.g., economic value, etc.):	
	Composite (total) stock: Total soil carbon (TSC) = Soil organic carbon (SOC) + Soil inorganic carbon (SIC)					
Past (e.g., post-development disclosures)	- Soil orders (Entisols, Inceptisols, Histosols, Alfisols, Mollisols, Ultisols) - State (Illinois); - County (102 counties)		Environment; Soil health		“Avoided” or “realized” social cost of carbon (SC-CO ₂) emissions (carbon footprint, CF):	
Current (e.g., status)			- Regulation (e.g., carbon sequestration); - Provisioning (e.g., food production)		- Carbon gain (sequestration); - Carbon loss	- \$46 per metric ton of CO ₂ applicable for the year 2025 (2007 U.S. dollars with an average discount rate of 3% [19])
Future (e.g., pre-development disclosures)						
Conflicts of Interest (COI)						
Soil Health Continuum						
Loss and Damage (L&D)						
Liability (Responsibility)						