TerrainLogic Soil-Loss Analysis Report

Conservation outcome

PASS

Predicted annual soil loss is at or below the soil-loss tolerance.
A = 1.22 ton/acre/year T = 4.00 ton/acre/year Difference = 2.78 ton/acre/year

Model results

R	K	LS	C	P	A	T
160	0.3200	0.8500	0.0280	1.0000	1.22	4.00
Rainfall erosivity	Soil erodibility	Slope factor	Cover-management	Support practice	ton/ac/year	ton/ac/year

Ending soil condition

Plant-available soil moisture	68.0% of root-zone available-water capacity
Available root-zone water	2.72 in of 4.00 in capacity
Soil Conditioning Index (SCI)	0.420 (improving)
SCI subfactors (OM / FO / ER)	0.310 / 0.240 / -0.130

Project and location

Project title	Allen County No-Till Corn-Soybean Field
Location	Allen County, Indiana | County GEOID 18003 | CMZ 55
Run information	Created August 10, 2026 at 16:37 UTC | Run ID: realistic-erosion-allen-in-001
Field boundary	Selected field boundary | Centroid: 41.09020, -85.06310

Data provenance and methods

Terrain	Slope: 4.20%, field-average slope derived from DEM. Length: 320 ft, dominant overland-flow length derived from DEM. Original DEM values: 4.20% and 320 ft. USGS 3DEP via The National Map Access API; retrieved/processed August 10, 2026 at 16:00 UTC.
Soils and T	USDA NRCS Soil Data Access (SSURGO); aggregate selection. Retrieved August 10, 2026 at 16:00 UTC. Map units: Blount silt loam, 2 to 6 percent slopes.
Climate and R	Allen County, Indiana representative climate. Climate source: climates\>USA\>Indiana\>Allen County. Daily R source: local daily erosivity table; annual R = 160.
Management	Corn grain-soybean rotation | no-till planting | cereal rye winter cover crop

Review and digital signature

The signer acknowledges review of the inputs, provenance, assumptions, and reported conservation outcome.

ADOBE DIGITAL SIGNATURE FIELD	Signer name / date
Click here in Adobe Acrobat to apply a certificate-based digital signature.	_____ _____

Planning estimate. Supporting manifest, result, daily, and graph files are retained in the associated project case folder.