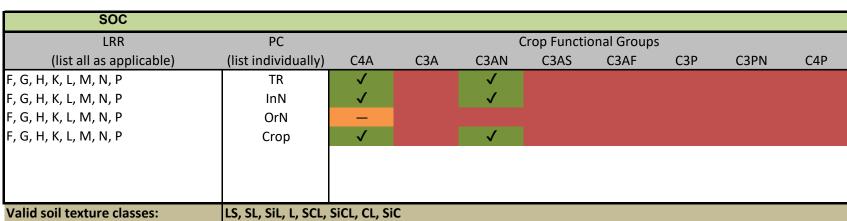
NOT valid LRR x F
Valid LRR x PC x C
Valid LRR x PC x C

		V	ersion 1.1a			Valid LF	RR x PC x CFG, s
Dr. Bria	n McCon	key (Viresco	Solutions)				
. David G		(Independer					
	Generali	zed Validatio	,	I			
		30	0-Jan-2024			Land Reso	urce Region (LR
				Abv	Description		
				С	California Subtro	pical Fruit, T	ruck, and Speci
				E	Rocky Mountain	Range and F	orest Region
				F	Northern Great F	Plains Spring	Wheat Region
al Groups	5			G	Western Great P	lains Range a	and Irrigated Re
C3AF	C3P	C3PN	C4P	н	Central Great Pla	ins Winter V	Vheat and Rang
				К	Northern Lake St	ates Forest a	and Forage Regi
				L	Lake State Fruit,	Truck Crop, a	and Dairy Regio
				М	Central Feed Gra	ins and Lives	stock Region
				N	East and Central	Farming and	Forest Region
				0	Mississippi Delta	Cotton and	Feed Grains Re
				Р	South Atlantic ar	nd Gulf Slope	Cash Crops, Fo
				Т	Atlantic and Gulf	Coast Lowla	nd Forest and (
						Practice	Category (PC)
				Abv	Description		
				TR	Soil disturbance	and/or resid	ue managemer
al Groups	5			Crop	Cropping practic	es, planting a	and harvesting
C3AF	C3P	C3PN	C4P	InN	Inorganic nitroge		-
				OrN	Organic amendr		•••
				Water	Water managem		
							ional Group (CF
				Abv	Description		
				C4A	C4 Annuals		
				C3A	C3 Annual herba	ceous	
				C3AN	C3 Annual N-fixir	ng herbaceou	JS
				C3AS	C3 Annual shrub		
				C3AF	C3 Annual herba	ceous floode	ed
				C3P	C3 Perennial		
al Groups	5			C3PN	C3 Perennial N-fi	xing	
3AF	C3P	C3PN	C4P	C4P	C4 Perennial	Ū	
						Soil Te	xture Classes
				Abv	Description	Abv	Description
				S	Sand	SCL	Sandy Clay
				LS	Loamy Sand	CL	Clay Loam
				SL	Sandy Loam	SiCL	Silty Clay Lo
					loom	50	Sandy Clay

Model Review Form Soil Enrichment Protocol V1.1							
Model Name & Version	ecosys_HT Model Version 1.0						
Model Developer	HabiTerre, Inc.						
SEP Model Requirements and Guidance Version	Version 1.1a						
Model Reviewer(s)	Dr. Brian McConkey (Viresco Solutions)						
model Reviewel(3)	Dr. David Gustafson (Independent Scientist)						
Project-Specific (Type 1) or Generalized Validation (Type 2)?	Generalized Validation (Type 2)						
Model Review Report Submittal Date	30-Jan-2024						

Validated Parameters by Emission Source



N2O									
LRR	PC			(Crop Function	onal Group	S		
(list all as applicable)	(list individually)	C4A	C3A	C3AN	C3AS	C3AF	C3P	C3PN	C4P
F, G, H, K, L, M, N, P	TR	\checkmark		\checkmark					
F, G, H, K, L, M, N, P	InN	\checkmark		\checkmark					
F, G, H, K, L, M, N, P	OrN	—							
F, G, H, K, L, M, N, P	Crop	\checkmark		\checkmark					
Valid soil texture classes:	LS, SL, SiL, L, SCL, S	SiCL, CL, Si	iC						

CH4									
LRR	PC				Crop Fun	ctional Gro	ups		
(list all as applicable)	(list individually)	C4A	C3A	C3AN	C3AS	C3AF	C3P	C3PN	C4P
F, G, H, K, L, M, N, P	TR								
F, G, H, K, L, M, N, P	InN								
F, G, H, K, L, M, N, P	OrN								
F, G, H, K, L, M, N, P	Crop								
Valid soil texture classes:									

PC x CFG CFG, no stipulations CFG, some stipulations

LRR)

cialty Crop Region Region nge Region gion ion egion Forest, and Livestock Region Crop Region

ent

CFG)

n

Clay

SC

SiC

С

Loam

Silt

Silt Loam

SiL

Si

y Loam Silty Clay Loam Sandy Clay Silty Clay

LRR x PC x CFG Limitations						
Emission Source	LRR	РС	CFG	Reviewer Comments		
SOC	F, G, H, K, L, M, N, P	OrN	C4A	Both reviewers noted limited validation data for this combination. As such the use of this LRR x PC x CFG combination will be limited to project fields containing either CL or SiL soil types. Once model validation is expanded to include additional validation data for OrN x C4A or additional annual CFGs, then this limitation may be lifted.		
N2O	F, G, H, K, L, M, N, P	OrN	C4A	Both reviewers noted limited validation data for this combination. As such the use of this LRR x PC x CFG combination will be limited to project fields containing either SiL or L soil types. Once model validation is expanded to include additional validation data for OrN x C4A or additional annual CFGs, then this limitation may be lifted.		

Additional Comments on Model Usage							
Торіс	Comments						
Use of SYMFONI	The MVR mentions HabiTerre's use of the SYMFONI solution to improve predictions of SOC and N2O emission changes. Additional details of this approach are provided in Appendix A. Model reviewers have noted that use of SYMFONI has not been validated through this MVR.						